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OM protein - protein search, using sw model

Run on: April 5, 2006, 17:36:13 ; Search time 230 Seconds

(without alignments)
30.675 Million cell updates/secTitle: US-10-772-537-4
Perfect score: 49
Scoring table: BL03N62Gapop 10.0 , Gapext 0.5
Sequence: 1 HSFGVAVVE 10

Searched: 2166443 seqs., 705528306 residues

Total number of hits satisfying chosen parameters: 2166443

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
List first 100 summariesDatabase : UniProt_05.80:
1: uniprot_sprot:
2: uniprot_trembl:
*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	49	100.0	362	1 FETUA_PIG	B29700 sus scrofa
2	46	93.9	359	1 FETUA_BOVIN	B29763 bos taurus
3	46	93.9	364	1 FETUA_SHEEP	B29701 ovis aries
4	38	77.6	53	2 Q9LIS7_TOBAC	Q91187 nicotiana t
5	38	77.6	345	1 FETUA_MOUSE	B26999 mus musculus
6	38	77.6	348	1 FETUA_MERUN	B97515 meriones un
7	38	77.6	352	1 FETUA_RAT	B24090 ratmus norv
8	38	77.6	352	2 Q8BKD2_RAT	Q8BKD2 ratmus norv
9	38	77.6	553	2 Q8BKD2_RAT	Q7TP75 ratmus norv
10	38	77.6	951	2 Q4HX59_GIBZB	Q4HX59 gibberella
11	37	75.5	165	2 Q89X70_BRAJA	Q89X70 bromyphizob
12	37	75.5	370	2 Q58D17_BOVIN	Q58D17 bovis tauri
13	37	75.5	389	2 Q4WYN2_ASPPU	Q4WYN2 aspergillus
14	37	75.5	460	2 Q5SR77_ARATH	Q5SR77 arabidopsis
15	37	75.5	487	2 Q4WEH8_ASPPU	Q4WEH8 aspergillus
16	37	75.5	713	1 LRRN5_HUMAN	Q75325 homo sapien
17	37	75.5	750	2 Q7QJA7_ANOGA	Q9byr99 homo sapien
18	37	75.5	841	1 BACH2_HUMAN	Q9hxv4 pseudomonas
19	36	73.5	215	1 KAD_PSEAE	Q94gn4 oryza sativ
20	36	73.5	407	2 Q94GN4_ORYSA	Q5p0j1 azorinus sp
21	36	73.5	712	2 Q5P0J1_AZOSE	Q7pye4 anophelles g
22	36	73.5	2232	2 Q7PYE4_ANOGA	Q01677 bombyx mori
23	36	73.5	2342	2 Q5BZ_MANSM	Q65ve3 manehaimia
24	35	71.4	150	1 FABZ_PSEAE	Q819P1 pscoov
25	35	71.4	263	2 Q8D751_VIBTU	Q8d751 vibrio vuln
26	35	71.4	308	2 Q8D751_VIBTU	Q92G15 rhoococcus
27	35	71.4	323	2 Q92G15_rhoococcus	Q59uh0 candida alb
28	35	71.4	361	2 Q59uh0_CANAL	Q799i6 anophelles g
29	35	71.4	361	2 Q7PGI6_ANOGA	Q9vz33_drosophila
30	35	71.4	413	2 Q7PGI6_ANOGA	
31	35	71.4	557	2 Q9VZ33_DRONI	

ALIGNMENTS

RESULT 1			
ID FETU_PIG	STANDARD;	PRT;	362 AA.
AC P29700;			
DT 01-APR-1993 (Rel. 25; Created)			
DT 01-APR-1993 (Rel. 25; Last sequence update)			
DT 10-MAY-2005 (Rel. 47; Last annotation update)			
DE Alpha-2-HS-glycoprotein Precursor (Fetuin-A) (Fragment).			
GN Name=AHSG; Synonyms=FETU_PIG;			
OS Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Laurasiatheria; Cetartiodactyla; Suina; Suidae; Sus.			
OC NCBI_TaxID=9823;			
OX [1]			
RN NUCLEOTIDE SEQUENCE, AND PARTIAL PROTEIN SEQUENCE.			
RC TISSUE=Liver;			
RX MEDLINE=92209519; PubMed=1372866;			
RA Dziegielewska K.D., Mueller-Betler W.; Nawratil P., Brown W.M., Christie D.L., Saunders N.R.;			
RA RT "The nucleotide and deduced amino acid structures of sheep and pig fetuin. Common structural features of the mammalian fetuin family." Eur. J. Biochem. 205:321-331(1992).			
RL CC -1- SUBCELLULAR LOCATION: Secreted			
CC -1- TISSUE SPECIFICITY: Expressed by the liver and secreted in plasma.			
CC -1- SIMILARITY: Belongs to the fetuin family.			
CC -1- SIMILARITY: Contains 2 cystatin-like domains.			
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CC [2]			
CC DR PIR; S22395; S22395	- ; mRNA.		
DR GO:0005615; C:extracellular space; ISS.			
DR GO:0019210; C:kinase inhibitor activity; ISS.			
DR GO:0006953; P:acute-phase response; ISS.			
DR GO:0030502; P:negative regulation of bone mineralization; ISS.			
DR GO:0046627; P:negative regulation of insulin receptor sig. . ; ISS.			
DR GO:0006907; P:pinocytosis; ISS.			
DR GO:0050766; P:positive regulation of phagocytosis; ISS.			
DR GO:0050727; P:regulation of inflammatory response; ISS.			
DR GO:0001501; P:skeletal development; ISS.			
DR InterPro; IPR001010; Prot_inh_cystat.			
DR InterPro; IPR01363; Prot_inh_fetuin.			
DR Pfam; PF00031; Cystatin; $\frac{1}{2}$.			
DR SMART; SM00431; CY; 2.			
DR PROSITE; PS01244; FETUIN 1; 1.			
DR PROSITE; PS01255; FETUIN 2; 1.			
KW Direct protein sequencing; Glycoprotein; Repeat; Signal.			
FT SIGNAL <15			
FT CHAIN 16 362 Alpha-2-HS-glycoprotein.			
FT DOMAIN 14 258 Cystatin-like 1.			
FT DOMAIN 141 141 N-linked (GlcNAc. .) (Potential).			
FT CARBOHYD 96 96 N-linked (GlcNAc. .) (Potential).			
FT CARBOHYD 153 153 N-linked (GlcNAc. .) (Potential).			
FT CARBOHYD 173 173 N-linked (GlcNAc. .) (Potential).			
FT DISUFID 29 353 By similarity.			
FT DISUFID 86 97 By similarity.			
FT DISUFID 111 129 By similarity.			
FT DISUFID 143 146 By similarity.			
FT DISUFID 205 216 By similarity.			
FT DISUFID 227 244 By similarity.			
FT NON_TER 1 1			
SQ SEQUENCE 362 AA; 38425 MW; 532648EB434B5686 CRC64;			
Query Match 100.0%; Score 49; DB 1; Length 362;			
Best Local Similarity 100.0%; Pred. No. 0.25%; Mismatches 0; Indels 0; Gaps 0;			
DR EMBL; X16577; CAA34596.1; - ; mRNA.			

PIR; A35714; A35714.
 GlycosuitedDB; P12763; -.
 GO; GO:0005615; P:kinase inhibitor activity; ISS.
 GO; GO:0019210; P:acute-phase response; ISS.
 GO; GO:0006953; P:negative regulation of bone mineralization; ISS.
 GO; GO:0030502; P:negative regulation of insulin receptor sig. . ; ISS.
 GO; GO:0046627; P:negative regulation of pinocytosis; ISS.
 GO; GO:0006907; P:pinocytosis; ISS.
 GO; GO:005766; P:positive regulation of phagocytosis; ISS.
 GO; GO:0001501; P:skeletal development; ISS.
 DR InterPro; IPR00010; Prot_inh_Cysat.
 DR InterPro; IPR001363; Prot_inh_fetuin.
 DR Pfam; PF00031; Cystatin; $\overline{2}$.
 DR SMART; SM00421; CY; 2.
 DR PROSITE; PS01254; FETUIN_1; 1.
 DR PROSITE; PS01255; FETUIN_2; 1.
 KW Direct protein sequencing; Glycoprotein; Mineral balance;
 SIGNAL 1 18
 FT CHAIN 19 359 Alpha-2-HS-glycoprotein.
 FT DOMAIN 27 144 Cystatin-like 1.
 FT DOMAIN 145 261 Cystatin-like 2.
 FT SITE 143 144 Cleavage (by trypsin) (Potential).
 FT CARBOHYD 99 99 N-linked (GlcNAc. . .).
 FT /Pfam=CAR 0000611.
 FT CARBOHYD 156 156 N-linked (GlcNAc. . .).
 FT /Pfam=CAR 0000612.
 FT CARBOHYD 176 176 N-linked (GlcNAc. . .).
 FT CARBOHYD 271 271 O-linked (GalNAc. . .).
 FT CARBOHYD 280 280 O-linked (GalNAc. . .).
 FT CARBOHYD 282 282 O-linked (GalNAc. . .).
 FT CARBOHYD 341 341 O-linked (GalNAc. . .); partial.
 FT DISULFID 32 350 By similarity.
 FT DISULFID 89 100 By similarity.
 FT DISULFID 114 132 By similarity.
 FT DISULFID 146 149 By similarity.
 FT DISULFID 208 219 By similarity.
 FT DISULFID 230 248 By similarity.
 FT CONFLICT 57 58 KH -> VK (in Ref. 3).
 FT CONFLICT 72 72 R -> Q (in Ref. 2).
 FT CONFLICT 106 106 T -> H (in Ref. 2).
 FT CONFLICT 116 121 IHTLQ -> FSVVKL (in Ref. 2).
 FT CONFLICT 186 186 S -> R (in Ref. 4).
 FT CONFLICT 195 195 V -> P (in Ref. 2).
 SQ SEQUENCE 359 AA; 38419 MW; ED8F685C44CCB49B CRC64;

Query Match 93.9% Score 46; DB 1; Length 359;
 Best Local Similarity 90.0%; Pred. No. 1;
 Matches 9; Conservative 1; Missmatches 0; Indels 0; Gaps 0;

RESULT 3
 PFTUA SHEEP STANDARD PRT; 364 AA.
 AC P29701; 1 HSFGVAVSE 10
 DT 01-APR-1993 (Rel. 25, Created)
 DT 01-APR-1993 (Rel. 25, Last sequence update)
 DE 10-MAY-2005 (Rel. 47, Last annotation update)
 GN Alpha-2-HS-glycoprotein Precursor (Fetuin-A).
 Name=AHSG; Synonyms=PFTUA;
 OS Ovis aries (Sheep).
 Oukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butharia; Laurasiatheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Caprinae; Ovis.
 NCBI_TaxId=9440;
 RN [1] NUCLEOTIDE SEQUENCE, AND PROTEIN SEQUENCE OF 16-23.
 RP

RESULT 4
 Q9LL57 TOBAC ID Q9LL57_TOBAC PRELIMINARY;
 AC Q9LL57; 1 HSFGVAVSE 10
 DT 01-OCT-2000 (TREMBLrel. 15, Created)
 DT 01-OCT-2000 (TREMBLrel. 15, Last sequence update)
 DT 01-OCT-2000 (TREMBLrel. 15, Last annotation update)
 DE Alpha-2-HS-glycoprotein-like protein (Fragment).
 OS Nicotiana tabacum (Common tobacco).
 OC Buxaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 OC Spermatophyta; Magnoliophyta; eudicotyledons; core eudicots; asterids;
 OC Lamidae; Solanales; Solanaceae; Nicotiana.

RC TISSUE=Liver; MEDLINE=2209519; PubMed=1372866;
 RX Brown,W.M., Christie D.L., Saunders N.R., Nawratil P., Dziegielewska K.D., Mueller-Esterl W.; "The nucleotide and deduced amino acid structures of sheep and pig fetuin. Common structural features of the mammalian fetuin family." Eur. J. Biochem. 205:321-331(1992).
 RA -; SUBCELLULAR LOCATION: Secreted.
 RA -; SIMILARITY: Belongs to the fetuin family.
 RA -; Contains 2 cystatin-like domains.
 CC This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL Outstation - the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not removed.
 CC DR EMBL; X16578; CAA34597.1; -; mRNA.
 DR PIR; S22394; S22394.
 DR GO; GO:0005615; C:extracellular space; ISS.
 DR GO; GO:0019210; P:kinase inhibitor activity; ISS.
 DR GO; GO:0016953; P:acute-phase response; ISS.
 DR GO; GO:0030502; P:negative regulation of bone mineralization; ISS.
 DR GO; GO:0046627; P:negative regulation of insulin receptor sig. . ; ISS.
 DR GO; GO:006907; P:pinocytosis; ISS.
 DR GO; GO:0050766; P:positive regulation of phagocytosis; ISS.
 DR GO; GO:0050227; P:regulation of inflammatory response; ISS.
 DR GO; GO:1001501; P:skeletal development; ISS.
 DR InterPro; IPR001363; Prot_inh_fetuin.
 DR Pfam; PF00031; Cystatin; $\overline{2}$.
 DR SMART; SM00421; CY; 2.
 DR PROSITE; PS01254; FETUIN_1; 1.
 DR PROSITE; PS01255; FETUIN_2; 1.
 DR InterPro; IPR001363; Prot_inh_fetuin.
 DR SMART; SM00043; CY; 2.
 DR PROSITE; PS01254; FETUIN_1; 1.
 DR Direct protein sequencing; Glycoprotein; Repeat; Signal.
 FT SIGNAL 1 15
 FT CHAIN 16 364 Alpha-2-HS-Glycoprotein.
 FT DOMAIN 27 144 Cystatin-like 1.
 FT DOMAIN 145 261 Cystatin-like 2.
 FT CARBOHYD 99 99 N-linked (GlcNAc. . .) (Potential).
 FT CARBOHYD 156 156 N-linked (GlcNAc. . .) (Potential).
 FT CARBOHYD 176 176 N-linked (GlcNAc. . .) (Potential).
 FT DISULFID 32 355 By similarity.
 FT DISULFID 89 100 By similarity.
 FT DOMAIN 146 122 By similarity.
 FT CARBOHYD 146 149 By similarity.
 FT DISULFID 208 219 By similarity.
 FT DISULFID 230 248 By similarity.
 FT VARIANT 16 17 Missing (in 60 to 70% of the chains).
 SQ SEQUENCE 364 AA; 38680 MW; 5046E569789AA/DDB CRC64;

Query Match 93.9% Score 46; DB 1; Length 364;
 Best Local Similarity 90.0%; Pred. No. 1.1;
 Matches 9; Conservative 1; Missmatches 0; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
 Db 313 HTFSGVAVSE 322

RESULT 3
 PFTUA SHEEP STANDARD PRT; 364 AA.
 AC P29701; 1 HSFGVAVSE 10
 DT 01-APR-1993 (Rel. 25, Created)
 DT 01-APR-1993 (Rel. 25, Last sequence update)
 DE Alpha-2-HS-glycoprotein Precursor (Fetuin-A).
 GN Name=AHSG; Synonyms=PFTUA;
 OS Ovis aries (Sheep).
 Oukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Butharia; Laurasiatheria; Cetartiodactyla; Ruminantia; Pecora; Bovidae; Caprinae; Ovis.
 NCBI_TaxId=9440;
 RN [1] NUCLEOTIDE SEQUENCE, AND PROTEIN SEQUENCE OF 16-23.
 RP

[1] NUCLEOTIDE SEQUENCE.
 RP TISSUE=Root;
 RC PubMed=10986241;
 RX Wang J., Shaheen M., Brookman H., Timko M.P.;
 RA "Characterization of cDNAs differentially expressed in roots of
 tobacco (Nicotiana tabacum cv Burley 21) during the early stages of
 alkaloid biosynthesis.";
 RT Plant Sci. 158:19-32 (2000).
 RL RN [14]
 RN NUCLEOTIDE SEQUENCE.
 RP TISSUE=Root;
 RC Sheehan M.J., Wang J., Brookman H.E., Timko M.P.;
 RA Submitted (JUN-1999); to the EMBL/GenBank/DDBJ databases.
 RL DR EMBL: AF156369; AAF85799.1; - ; mRNA.
 FT NON-TER 1 1
 FT NON-TER 53 53
 SQ SEQUENCE 53 AA; 5414 MW; F3D7491638DF4D34 CRC64;
 Query Match 77.6%; Score 38; DB 2; Length 53;
 Best Local Similarity 80.0%; Pred. No. 6.3%;
 Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 CC -!- SIMILARITY: Belongs to the fetuin family.
 CC -!- SIMILARITY: Contains 2 cystatin-like domains.

Qy 1 HSFGVAVVE 10
 :||| |||||
 Db 24 RAFSPVAVVE 33

RESULT 5
 FETUFA MOUSE STANDARD; PRT; 345 AA.
 ID FETUFA MOUSE STANDARD; PRT; 345 AA.
 AC 035634;
 DT 01-APR-1993 (Rel. 25, Created)
 DT 01-APR-1993 (Rel. 25, Last sequence update)
 DT 10-MAY-2005 (Rel. 47, Last annotation update)
 DE Alpha-2-HS-Glycoprotein precursor (Fetuin-A) (Countertryptin).
 GN Name=AhsG; Synonyms=Fetufa;
 OS Mus musculus (Mouse).
 OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 OC Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi;
 OC Muroidea; Murinae; Murinae; Mus.
 NCBI_TaxID=10050;
 RN RN NUCLEOTIDE SEQUENCE.
 RC TISSUE=Liver;
 RX MEDLINE=9222308; PubMed=1373325; DOI=10.1016/0167-4781(92)90522-2;
 RA Yang F., Chen Z.-L., Bergeron J.M., Cupples R.L., Friederichs W.E.;
 RT "Human alpha 2-HS-Glycoprotein/bovine fetuin homologue in mice:
 RT identification and developmental regulation of the gene.";
 RL Biochim. Biophys. Acta 1130:149-156 (1992).
 RN RN NUCLEOTIDE SEQUENCE.
 STRAIN=129;
 RX MEDLINE=98058938; PubMed=9395485; DOI=10.1074/jbc.272.50.31496;
 RA Jähnichen-Dechent W., Schinke T., Tränidl A., Müeller-Esterl W.,
 RA Sabitzer F., Kaiser S., Blessing M.;
 RT "Cloning and targeted deletion of the mouse fetuin gene.";
 RL J. Biol. Chem. 272:31496-31503 (1997).
 RN RN NUCLEOTIDE SEQUENCE [LARGE SCALE RNA].
 RC STRAIN=FVB/N; TISSUE=Liver, and Salivary gland;
 RX MEDLINE=23388257; PubMed=12477932; DOI=10.1073/pnas.242603899;
 RA Straubberg R.L., Feingold E.A., Grouse L.H., Derge J.G.,
 RA Klaunser R.D., Colling F.S., Wagner L., Shemesh C.M., Schuler G.D.,
 RA Altschuler S.F., Zeeberg B., Buetow K.H., Schaafter C.F., Bhat N.K.,
 RA Hopkins R.F., Jordan H., Moore T., Max S.I., Wang J.J., Hsieh F.,
 RA Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L.,
 RA Stapleton M., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E.,
 RA Brownstein M.J., Usdin T.B., Yoshiaki S., Carninci P., Prange C.,
 RA Raha S.S., Loquellano N.A., Peters G.J., Abramson R.D., Mullphy S.J.,
 RA Bosai S.A., McKernan K.J., Malek J.A., Guraratne P.H.,
 RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W.,
 RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A.,

RA PAHEY J., Helton E., Ketteman M., Madan A., Rodrigues S., Sanchez A.,
 RA Whiting M., Madan A.C., Young A.C., Shevchenko Y., Bouffard G.G.,
 RA Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C.,
 RA Rodriguez A.C., Grimwood J., Schnitz J.J., Myers R.M.,
 RA Butterfield Y.S.N., Skarzynski M.I., Skalska U., Smailus D.E.,
 RA Schnurch A., Schein J.E., Jones S.J.M., Marra M.A.,
 RT "Generation, and initial analysis of more than 15,000 full-length human
 RT and mouse cDNA sequences.";
 RL Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).
 RN RN [14]
 RP PARTIAL PROTEIN SEQUENCE.
 RX MEDLINE=33352281; PubMed=7688730;
 RA Yamamoto K., Sinohara H.;
 RT "Isolation and characterization of mouse countertryptin, a new trypsin
 inhibitor belonging to the mammalian fetuin family.";
 RL J. Biol. Chem. 268:17750-17753 (1993).
 CC -!- FUNCTION: Probably involved in differentiation.
 CC -!- SUBCELLULAR LOCATION: Secreted.
 CC -!- TISSUE SPECIFICITY: Liver is the major site of synthesis, but
 CC fetuin is also expressed in limb buds and other extrahepatic
 CC tissues during development.
 CC -!- SIMILARITY: Belongs to the fetuin family.
 CC -!- SIMILARITY: Contains 2 cystatin-like domains.

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 CC use as long as its content is in no way modified and this statement is not
 CC removed.

DR EMBL; S99534; AAB22070.1; - ; mRNA.
 DR EMBL; AF002900; AAB81718.1; - ; Genomic DNA.
 DR EMBL; AF002146; CAA05220.1; - ; Genomic DNA.
 DR EMBL; BC012678; AAH12678.1; - ; mRNA.
 DR EMBL; BC019822; AAH19822.1; - ; mRNA.
 DR PIR; S21094; S21094.
 DR Ensembl; ENSMUSG0000022868; Mus musculus.
 DR MGI; MG1:107189; Absg.
 DR GO; GO:000561; C: extracellular space; ISS.
 DR GO; GO:0019210; F: kinase inhibitor activity; ISS.
 DR GO; GO:0006953; P: acute-phase response; ISS.
 DR GO; GO:0030502; P: negative regulation of bone mineralization; IDA.
 DR GO; GO:0046627; P: negative regulation of insulin receptor sig. . . ; ISS.
 DR GO; GO:0001503; P: ossification; IDA.
 DR GO; GO:0006907; P: pinocytosis; ISS.
 DR GO; GO:0050766; P: positive regulation of phagocytosis; ISS.
 DR GO; GO:0050727; P: regulation of inflammatory response; ISS.
 DR InterPro; IPR000010; Prot_inh_cystat.
 DR InterPro; IPR001365; Prot_inh_fetuin.
 DR Pfam; PF00031; Cybrat1.
 DR PROSITE; PS01254; FETUIN 1.
 DR PROSITE; PS01255; FETUIN 2.
 DR KW Direct protein sequencing; Glycoprotein; Repeat; Signal.
 FT SIGNAL 1 18
 FT CHAIN 19 345
 FT DOMAIN 27 144
 FT DOMAIN 145 255
 FT CARBOHYD 99 99
 FT CARBOHYD 156 156
 FT DISULFID 176 176
 FT DISULFID 32 336
 FT DISULFID 89 100
 FT DISULFID 114 132
 FT DISULFID 146 149
 FT DISULFID 208 219
 FT DISULFID 230 247
 FT CONFLICT 71 71
 SQ SEQUENCE 345 AA; 37326 MW; 4B/B9C9B1410658E CRC64;
 SQ Query Match 77.6%; Score 38; DB 1; Length 345;
 SQ Best Local Similarity 80.0%; Pred. No. 44;
 SQ Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy	1 HSFGVAVSE 10 : Db 302 HAFSPVAVSE 311	PETU RAT STANDARD; PRT; 352 AA.
RESULT 6		
PETU MERUN	STANDARD;	PRT; 348 AA.
AC P97515;		
DT 16-OCT-2001 (Rel. 40, Created)		
DT 16-OCT-2001 (Rel. 40, Last sequence update)		
DT 10-MAY-2005 (Rel. 47, Last annotation update)		
DE Alpha-2-HS-Glycoprotein precursor (Fetuin-A) (Glycoprotein PP63) (59 kDa bone sialic acid-containing protein) (BSP).		
GN Name=Ahsq; Synonyms=Fetu;		
OS Meriones unguiculatus (Mongolian jird) (Mongolian gerbil).		
OC Bulyaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; Muroidea; Muridae; Murinae; Ractus.		
NCBI_TaxID=10447;		
RN [1]		
RP NUCLEOTIDE SEQUENCE, AND PROTEIN SEQUENCE OF 19-38.		
RC TISSUE=Liver;		
RX MEDLINE=7279057; PubMed=9133634;		
RA Goro K., Yoshida K., Suzuki Y., Yamamoto K., Sinoohara H.;		
RT "Molecular cloning and sequencing of cDNA encoding plasma countertrypin, a member of mammalian fetuin family, from the Mongolian gerbil, <i>Meriones unguiculatus</i> .";		
RT J. Biochem. 121:619-625(1997).		
CC - - SUBCELLULAR LOCATION: Secreted.		
CC - - TISSUE SPECIFICITY: Expressed by the liver and secreted in plasma.		
CC - - SIMILARITY: Belongs to the fetuin family.		
CC - - SIMILARITY: Contains 2 cystatin-like domains.		
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CC DR D88777; BAA13702_1; -; mRNA.		
DR P1R; JCS431; JC531.		
DR InterPro: IPR000010; Prot_inh_Cystat.		
DR InterPro: IPR01163; Prot_inh_fetuin.		
DR Pfam: PF00031; Cystatin_2.		
DR SMART: SM00043; Cy_2.		
DR PROSITE: PS01254; FETUIN_1; 1.		
DR PROSITE: PS01255; FETUIN_2; 1.		
KW Direct protein sequencing; Glycoprotein; Repeat; Signal.		
FT SIGNAL 1 18		
FT CHAIN 1 18		
FT DOMAIN 19 348 Alpha-2-HS-Glycoprotein.		
FT DOMAIN 27 144 Cystatin-like 1.		
FT DOMAIN 145 254 Cystatin-like 2.		
FT CARBOHYD 99 99 N-linked (GLCNAC. . .) (Potential).		
FT CARBOHYD 156 156 N-linked (GLCNAC. . .) (Potential).		
FT CARBOHYD 176 176 N-linked (GLCNAC. . .) (Potential).		
FT DISULFID 32 339 By similarity.		
FT DISULFID 89 100 By similarity.		
FT DISULFID 114 132 By similarity.		
FT DISULFID 146 149 By similarity.		
FT DISULFID 208 219 By similarity.		
FT DISULFID 230 247 By similarity.		
SQ SEQUENCE 348 AA; 37375 MW;		
Query Match 77.6%; Score 38; DB 1; Length 348;		
Best Local Similarity 80.0%; Pred. No. 45; Mismatches 1; Indels 0; Gaps 0;		
Matches 8; Conservative 1;		
Qy 1 HSFGVAVSE 10 : Db 304 HAFSPVAVSE 313		

"The rat protein encoded by clone pp63 is a fetuin/alpha-2-HS glycoprotein-like molecule, but is it the tyrosine kinase inhibitor pp63?"	Qy	1 HSFGYASVE 10
Cell 68:7-8 (1992).	Db	306 HAFSPYASVE 315
- - FUNCTION: Could inhibit both insulin-receptor tyrosine kinase and concordantly, antagonize the mitogenic effect of the hormone in cultured rat hepatoma cells.	RESULT 8	
- - SUBCELLULAR LOCATION: Secreted.	ID Q5BKD2_RAT PRELIMINARY;	PRT; 352 AA.
- - TISSUE SPECIFICITY: Synthesized in liver and secreted by the hepatocytes in the blood.	AC Q5BKD2;	
- - PTM: Undergoes complex posttranslational modification involving N-glycosylation, and addition of fucose and sialic acid residues. Phosphorylation occurs at a serine residue.	DT 10-MAY-2005 (TRIMBLRe1. 30, Created)	
- - SIMILARITY: Belongs to the fetuin family.	DT 10-MAY-2005 (TRIMBLRe1. 30, Last sequence update)	
- - SIMILARITY: Contains 2 cystatin-like domains.	DT 10-MAY-2005 (TRIMBLRe1. 30, Last annotation update)	
This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - use as long as its content is in no way modified and this statement is removed.	DE DE Alpha-2-HS-glycoprotein.	
EMBL: M29758; AAA75502.1; -; mRNA. EMBL: X63446; CAA45042.1; -; mRNA. PR: D10261; BA01101.1; -; mRNA.	DE Name=ahsg; OS Rattus norvegicus (Rat). OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; OC Mammalia; Butheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; OC Muridae; Murinae; Rattus. RN [1]	
RP NUCLEOTIDE SEQUENCE.	RC TISSUE=Spleen; RC MEDLINE=22388257; PubMed=12477932; DOI=10.1073/pnas.242603899;	
REB; 2015; Ahsg.	RA Strausberg R.L., Feingold E.A., Grouse L.H., Derge J.G., Schuler G.D., Klausner R.D., Collins F.M., Wagner L., Schaefer C.F., Bhat N.K., Altschul S.F., Zeeberg B., Buetow K.H., Hopkins R.F., Jordan R., Moore T., Max S.I., Wang J., Hsieh P., Diatchenko L., Marusina K., Farmer A.A., Rubin G.M., Hong L., Scheetz T.E., Steapleton M., Soares M.B., Bonaldo M.F., Casavant T.J., Brownstein M.J., Usdin T.B., Yoshiyuki S., Carninci P., Prange C., Baha S.S., Loqueline D.A., Peters G.J., Abramson R.D., Mullany S.J., Bosak S.A., McEwan P.J., McKernan K.J., Malek J.A., Gunaratne P.H., Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Gibbs R.A., Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., Pahay J., Helton E., Kerremans M., Madan A., Rodriguez S., Sanchez A., Whiting M., Madan A., Young A.C., Shvchenko Y., Bouffard G.G., Bradbury R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grimwade J., Schmutz J., Myers R.M., Butterfield Y.S.N., Krzywinski M.I., Skalska U., Smilus D.E., Schneirach A., Schein J.E., Jones S.J.M., Marra M.A., RT Generation and initial analysis of more than 15,000 full-length human RT and mouse cDNA sequences.";	
GO: 0005615; P:kinase inhibitor activity; NAS.	RA Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002). RN [2]	
GO: 0001920; GO:0016953; P:acute-phase response; ISS.	RP NUCLEOTIDE SEQUENCE.	
GO: 00030502; P:negative regulation of bone mineralization; ISS.	RC TISSUE=Spleen;	
GO: 00030308; P:negative regulation of cell growth; IDA.	PG NTH MGC Project;	
GO: 0046627; P:negative regulation of insulin receptor sig. . . ; IDA.	RL Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.	
GO: 00006907; P:pinocytosis; ISS.	DR RNBL: BC091118; AAH91118.1; -; mRNA.	
GO: 0005766; P:positive regulation of phagocytosis; ISS.	SQ SEQUENCE 352 AA; 37982 MW;	
GO: 0050727; P:regulation of inflammatory response; ISS.	Query Match Best Local Similarity 77.6%; Score 38; DB 2; Length 352; Matches 8; Conservative 8; Mismatches 1; Indels 0; Gaps 0;	
GO: 0001501; P:skeletal development; ISS.	Qy 1 HSFGYASVE 10	
InterPro: IPR000010; Prot_inh_cystatin.	Db 306 HAFSPYASVE 315	
InterPro: IPR016363; Prot_inh_fetuin.		
Pfam: PF00031; Cystatin; 2.		
SMART: SM00043; Cy, 2.		
PROSITE: PS01254; FETUIN-1, 1.		
PROSITE: PS01255; FETUIN-2, 1.		
Direct protein sequencing; Glycoprotein; Phosphorylation; Repeat; Signal.		
SIGNAL	1 18	
CHAIN	19	
DOMAIN	27	
DOMAIN	145	
STTNE	143	
CARBOHYD	99	
CARBOHYD	156	
CARBOHYD	176	
DISULFID	32	
DISULFID	343	
DISULFID	89	
DISULFID	100	
DISULFID	114	
DISULFID	132	
DISULFID	146	
DISULFID	149	
DISULFID	208	
DISULFID	219	
DISULFID	230	
DISULFID	247	
CONFLICT	21	
CONFLICT	29	
CONFLICT	33	
CONFLICT	34	
CONFLICT	46	
CONFLICT	76	
CONFLICT	236	
CONFLICT	241	
CONFLICT	329	
SEQUENCE	352 AA; 37982 MW; 43564F60F3C7C90A CRC64;	
Query Match Best Local Similarity 77.6%; Score 38; DB 1; Length 352; Matches 8; Conservative 8; Mismatches 1; Indels 0; Gaps 0;	OC Rattus norvegicus (Rat). OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; OC Mammalia; Butheria; Euarchontoglires; Glires; Rodentia; Sciurognathi; OC Muridae; Murinae; Rattus.	

OX	NCBI_TaxID=10116;	Query Match Score 38; DB 2; Length 951;
RN	[1]	Best Local Similarity 70.0%; Pred. No. 1.3e+02;
RP	NUCLEOTIDE SEQUENCE;	Mismatches 2; Indels 0;
RA	Li W.Q., Li Y.C., Chang C.F., Zhao L.F., Ma H., Wang L., Wang S.F., Han H.P., Wang G.P., Chai L.Q., Yuan J.Y., Yang K.J., Yan H.M., Shi J.B., Rahman S., Wang Q.N., Zhang J.B., Submitted (JUN-003) to the ENB/GenBank/DDJB databases.	Gaps 0;
RL	EMBL:AY35170; AAP25271.1; -; mRNA	
DR	GO:0004869; F:cytostine protease inhibitor activity; IEA.	
DR	InterPro; IPR00010; Prot_inh_cystat.	
DR	Interspro; IPR001363; Prot_inh_fetuin.	
DR	SMART; SM00043; Cy_2.	
DR	PROSITE; PS01244; FETUIN_1; 1.	
DR	PROSITE; PS01555; FETUIN_2; 1.	
SQ	SEQUENCE 553 AA; 61484 MW; DB928694D1468375 CRC64; Best Local Similarity 80.0%; Pred. No. 72; Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;	
Qy	1 HSFGVASVE 10	
Db	495 HAFSPVAVSE 504	
RESULT 10		
Q4IX59_GIBZB	Q4IX59_GIBZB PRELIMINARY; PRT; 951 AA.	
ID	Q4IX59_GIBZB	
AC		
DT	13-SEP-2005 (TREMBLrel. 31, Last sequence update)	
DT	13-SEP-2005 (TREMBLrel. 31, Last annotation update)	
DR	"Complete genomic sequence of nitrogen-fixing symbiotic bacterium Bradyrhizobium japonicum USDA110.";	
DE	Hypothesistest	
GN	ORFNames=FG10449.1;	
OS	Gibberella zeae PH-1.	
OC	Hypocreomycetidae; Ascomycota; Pezizomycotina; Sordariomycetes; Hypocreales; Nectriaceae; Gibberellina.	
OX	NCBI_TaxID=229533;	
RN	NUCLEOTIDE SEQUENCE.	
RC	STRAIN=PH-1;	
RA	Birren B., Nusbaum C., Abouelleil A., Allen N., Anderson S., Choepel Y., Collymore A., Dooley K., Elkins T., Engels R., Gardyna S., Gerre S., Graham L., Grand-Pierre N., Hafze N., Hagopian D., Haigis B., Hall J., Horton L., Huine W., Iliev I., Jaffe D., Johnson R., Jones C., Kamal M., Karatas A., Landers T., Lembard-Toh K., Levins R., Maclean C., Mabbutt R., Macleod P., Major J., Manning J., Matthews C., Maucler E., McCarthy M., Mcdermid J., Meneus L., Minova T., Mlenga V., Murphy T., Naylor J., Nguyen C., Nicol R., Nielsen C.B., Norbu C., O'Connor T., O'Donnell P., O'Neill D., Oliver J., Peterson K., Phunkhang P., Pierce N., Purcell S., Rachupka A., Ramasamy U., Raymond C., Reita R., Rice C., Rogov P., Roman J., Schauer S., Schupback R., Seaman S., Severy P., Shirnov S., Smith C., Spencer B., Strange-Thomann N., Stojanovic N., Stubbs M., Talamas J., Tesfaye S., Theodore J., Topham K., Travers M., Vassiliev H., Venkataraman V.S., Viel R., Vo A., Wang S., Wilson B., Wu X., Wyman D., Young G., Zainoun J., Zambeck L., Zimmer A., Zody M., Lander E.;	
RA	"Fusarium graminearum genome sequence."; Submitted (FBN-004) to the ENB/GenBank/DDJB databases.	
RL	-! CAUTION: The sequence shown here is derived from an ENB/GenBank/DDJB whole genome shotgun (WGS) entry which is preliminary data.	
CC	EMBL: AACM0100435; EAA68323.1; -; Genomic_DNA.	
CC	Hypothetical protein.	
DR	SEQUENCE 951 AA; 105375 MW; BFA31EBBD189DC5 CRC64;	
RT	"Sequence evaluation of four pooled-tissue normalized bovine cDNA	

libraries and construction of a gene index for cattle." *Genome Res.* 11:626-630(2001)

RA	Haas H., Harris D., Khouri N., Kitamoto K., Kobayashi T., Kulkarni R., Jimenez J., Lord A., Lu C., Monod M., Murphy L., O'Neil S., Paulsen I., Reichard B.L., Rodiguez-Pena J.M., Ronning C.M., Rodriguez G.D., Salzberg S.L., Sanchez M., Seeger K., Squares R., Weidman J., White O., Woodward J., Yu J.-H., Galagan J.E., Asai K., Galleguillos C.R., Weidman J., Machida M., Hall N., Barrell G., Fraser K., Denning D.W., Puccetti P., Puccetti P., Subramanian S., "Genomic sequence of the pathogenic and allergenic filamentous fungus Aspergillus fumigatus"; Submitted (MAY-2005) to the EMBL/GenBank/DBJ databases.
CC	-!! - CAUTION: The sequence shown here is derived from an EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is preliminary data.
DR	AAHF01000011; EAL85999.1; - ; Genomic DNA.
KW	Hypothetical protein.
SQ	SEQUENCE 487 AA; 53160 MW;
Qy	1 HSFGVAVSE 10
Db	383 HSPNGISSFEE 392
Query Match 75.5%; Score 37; DB 2; Length 487;	
Best Local Similarity 60.0%; Pred. 1e+02;	
Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps	
RESULT 1.6	
LRRN5 HUMAN STANDARD PRT; 713 AA.	
ID	Q5325; QST070; Q6TDX0; Q8N182;
AC	DT 16-OCT-2001 (Rel. 40; Created)
DT	10-MAY-2005 (Rel. 47; Last sequence update)
DT	13-SEP-2005 (Rel. 48; Last annotation update)
DE	Leucine-rich repeats neuronal protein 5 precursor (Glioma amplified on chromosome 1 protein).
DS	Name=LRRN5; Synonyms=GAC1; ORNames=UNQ2956/PRO293;
GN	OS Homo sapiens (Human).
OC	Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominoidea; Homo.
OC	NCBI_TAXID=9606;
OX	RN [1]
RN	NUCLEOTIDE SEQUENCE [LARGE SCALE MRNA]
RC	TISSUE-Glia tumor;
RX	Medline=98324709; PubMed=9662332; DOI=10.1038/sj.onc.1201828;
RA	Mailfoy B., Almida A., Zhu X.X., Vogt N., Tyagi R., Mulcris M., Dutrillaux A.-M., Dutrillaux B., Ross D., Hanash S.; Dowd P., Eaton D., Foster J.S., Grimaldi C., Gu Q., Hass P.E., Heldens J., Huang A., Kim H.S., Klimowski L., Jin Y., Johnson S., Lee J., Lewis L., Liao D., Mark M.R., Robbie B., Sanchez C., Schoenfeld J., Seshogiri S., Simmonds L., Singh J., Smith V., Stinson J., Vagts A., Vandervelde R.J., Watanabe C., Weiland D., Woods K., Xie M.-H., Yansura D.G., Yi S., Yu G., Yuan J., Zhang M., Zhang Z., Goddard A.D., Wood W.I., Godovski P.J., Gray A.M.;
RA	"The secreted protein discovery initiative (SPDI), a large-scale effort to identify novel human secreted and transmembrane proteins: a bioinformatics assessment"; Genome Res. 13:2265-2270 (2003).

PT	TOPO_DOM	1.9	630	Extracellular (Potential).	DR PRINTS; PRO0019; LEURICHPT.
PT	TRANSMEM	631	651	Potential.	DR SMART; SM00365; LRR SD22; 4.
PT	TOPO_DOM	652	713	Cytoplasmic (Potential).	DR SMART; SM00369; LRR_TYP; 8.
PT	REPEAT	92	115	LRR 1.	DR SMART; SM00082; LRRCT; 1.
PT	REPEAT	116	139	LRR 2.	SQ SEQUENCE 750 AA; 83237 MW;
PT	REPEAT	140	163	LRR 3.	2A5DDA7D8B5B001A CRC64;
PT	REPEAT	165	187	LRR 4.	Query Match Similarity 75.5%;
PT	REPEAT	188	211	LRR 5.	Best Local Similarity 60.0%;
PT	REPEAT	213	235	LRR 6.	Mismatches 0;
PT	REPEAT	236	259	LRR 7.	Indels 0;
PT	REPEAT	261	283	LRR 8.	Gaps 0;
PT	REPEAT	309	333	LRR 9.	
PT	REPEAT	334	357	LRR 10.	
PT	REPEAT	359	385	LRR 11.	
PT	DOMAIN	422	511	Ig-like C2-type.	RESULT 18
FT	CARBONYD	94	94	N-linked (GLCNAC. . .) (Potential).	BACH2 HUMAN STANDARD PRT; 841 AA.
FT	CARBONYD	381	381	N-linked (GLCNAC. . .) (Potential).	ID BACH2_HUMAN STANDARD PRT; 841 AA.
FT	CARBONYD	555	555	N-linked (GLCNAC. . .) (Potential).	AC Q9BYV5; Q59H70; Q5NT93; Q9NTSS;
FT	CARBONYD	583	583	N-linked (GLCNAC. . .) (Potential).	AC (Rel. 41; Created)
FT	DISULFID	445	497	By similarity.	DT 28-FEB-2003 (Rel. 41; Last sequence update)
FT	VARIANT	7	7	P->L (in dbSNP:3789044).	DT 13-SEP-2005 (Rel. 48; Last annotation update)
FT	VARIANT	518	518	/FTId=VAR_021921.	Name=BACH2;
FT	CONFLICT	19	19	L->V (in dbSNP:3747631).	DB Transcription regulator protein BACH2 (BTB and CNC homolog 2).
FT	CONFLICT	355	355	/FTId=VAR_021922.	GN OS
FT	CONFLICT	474	474	A->T (in Ref. 2).	OC Homo sapiens (Human).
FT	CONFLICT	676	676	Y->A (in Ref. 1).	OC Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini; Hominoidea;
FT	SEQUENCE	713	AA:	A->P (in Ref. 4; AAH34047/AAH68541).	OC Homo.
SQ				8B97B131FF61254A CRC64;	OC NCBI_TaxID=9606;
Qy					RN [1]
Db					RP NUCLEOTIDE SEQUENCE [mRNA].
Qy					RX MEDLINE=2044861; PubMedID=1049928; DOI=10.1038/sj.onc.1203716;
Db					RA Sasaki S., Ito E., Toki T., Maekawa T., Kaneko R., Uenai T.,
Qy					RA Moto A., Nagai H., Kinoshita T., Yamamoto M., Inazawa J., Takeo M.M.,
Db					RA Nakahata T., Igarashi K., Yokoyama M.;
Qy					RA "Cloning and expression of human B cell-specific transcription factor
Db					RT BACH2 mapped to chromosome 6q15.";
Qy					RL Oncogene 19:3739-3749 (2000).
Db					RN [2]
Qy					RP NUCLEOTIDE SEQUENCE [mRNA].
Db					RX MEDLINE=21610638; PubMedID=11746976; DOI=10.1002/gcc.1200;
Qy					RA Vieira S.A.D., Deininger M.W.N., Sorour A., Sinclair P., Foroni L.,
Db					RA Goldman J.M., Melo J.V.;
Qy					RA "Transcription factor BACH2 is transcriptionally regulated by the
Db					RT ECR/ABL oncogene.";
Qy					RL Genes Chromosomes Cancer 32:3533-363 (2001).
Db					RN [3]
Qy					RP NUCLEOTIDE SEQUENCE [large scale mRNA].
Db					RC TISSUE=Brain;
Qy					RA Tokoi Y., Toyoda A., Takeda T., Sakaki Y., Tanaka A., Yokoyama S.,
Db					RA Ohara O., Nagase T., Kikuno F.R.;
Qy					RL Submitted (MAR-2005) to the EMBL/GenBank/DDBJ databases.
Db					RN [4]
Qy					RP NUCLEOTIDE SEQUENCE [large scale genomic DNA].
Db					RX MEDLINE=22935763; PubMedID=14574404; DOI=10.1038/nature02055;
Qy					RA Mungall A.J., Palmer S.A., Sims S.K., Edwards C.A., Ashurst J.L.,
Db					RA Wilming L., Jones M.C., Horton R., Hunt S.E., Scott C.E.,
Qy					RA Almeida J.P., Clamp M.E., Bethel G., Milne S., Ashwell R.I.S.,
Db					RA Babbage A.K., Bagguley C.L., Bailey J., Banerjee R., Barker D.J.,
Qy					RA Barlow K.F., Bates K., Beare D.M., Beasley H., Beasley O., Bird C.P.,
Db					RA Blakey S.E., Bray-Allen S., Brook J., Brown A.J., Brown J.Y.,
Qy					RA Burford D.C., Burrill W., Burton J., Carter C., Carter N.P.,
Db					RA Gibby L.M., Gillison C.J., Glithero R.J., Graham D.V., Grant M.,
Qy					RA Gribble S., Griffiths C., Griffiths M.N.D., Hall R., Hails K.S.,
Db					RA Hammond S., Harley J.L., Hart E.A., Heath P.D., Heathcott R.,
Qy					RA Holmes S.J., Howden P.J., Howell G.R., Huckle E., Humphries M.D., Johnson C.M., Joy A.A.,
Db					RA Humphrey S.J., Humphries M.D., Johnson C.M., Joy A.A.,

01-DEC-2001 (TREMBLrel. 1.9; Last sequence update)
 DT 01-OCT-2003 (TREMBLrel. 25; Last annotation update)
 DR Hypothetical protein QJ124_HQ3_28;
 GN Name=QJ124_H0_28;
 OS Oryza sativa (Japonica cultivar-group).
 OC Eukarya; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
 OC spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae;
 OC Ehrhartoideae; Oryzeae; Oryzae.
 NCBI_TaxID=39947;

[1] NUCLEOTIDE SEQUENCE
 RP Bueli C.R., Yuan Q., Ouyang S., Moffat K.S., Hill J.N., Gansberger K.,
 RA Brenner M., Burgess S., Hance M., Shvartsbeyn M., Tsitlin T.,
 RA Riggs F., Hsiao J., Zisman V., Blunt S., Pai G., Vanaken S.E.,
 RA Utterback T.P., Feldblum T.V., Quackenbush J., Salzberg S.E.,
 RA White O., Fraser C.M.;
 RL Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases.
 [2] NUCLEOTIDE SEQUENCE
 RP Bueli R.;
 RL Submitted (JUL-2002) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AC087852; AAK71566.1; -; Genomic_DNA.
 HSSP P08581; 1R1W.

DR Gramene; Q94GN1; -

DR GO:0005524; F:ATP binding; IEA.
 DR GO:0004674; F:protein serine/threonine kinase activity; IEA.
 DR GO:0004674; F:protein amino acid phosphorylation; IEA.
 DR GO:0004713; F:protein tyrosine kinase activity; IEA.
 DR InterPro; IPR00719; Prot kinase.
 DR InterPro; IPR08271; Ser_Thr_Pkin_AS.
 DR PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
 DR PROSITE; PS50018; PROTEIN_KINASE_ST; 1.
 KW Hypothetical protein.
 SQ SEQUENCE 407 AA; 44124 MW; DD4CB9AC2AF3EBCD CRC64;

Query Match 73.5%; Score 36; DB 2; Length 407;
 Best Local Similarity 75.0%; Pred. No. 1.4e+02;
 Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVAVS 8
 DR 13 HSFSGSS 20

RESULT 21
 Q5PQJ1_AZ0SE
 ID Q5PQJ1_AZ0SE PRELIMINARY;
 AC Q5PQJ1;_
 DT 01-FEB-2005 (TREMBLrel. 29; Created)
 DT 01-FEB-2005 (TREMBLrel. 29; Last sequence update)
 DS Hybrid sensor component of two-component regulation system.
 GN OrdeedLocusNames=Azo330480; ORFNames=ebA571;
 Azoarcus sp. (strain Ebn1).
 OC Bacteria; Proteobacteria; Betaproteobacteria; Rhodocyclales;
 NCBI_TaxID=76114;

RN [1] NUCLEOTIDE SEQUENCE
 RP STRAIN-Ebn1;
 RX PubMed=15551059; DOI=10.1007/s00203-004-0742-9;
 RA Rabus R., Kube M., Heider J., Beck A., Heitmann K., Widdel F., Reinhardt R.;
 RA "The genome sequence of an anaerobic aromatic-degrading denitrifying bacterium, strain Eb1." Arch. Microbiol. 183:27-36 (2005).

RL EMBL; CR553206; CAI09173.1; -; Genomic_DNA.
 DR GO; GO:001020; C:membrane; IEA.
 DR GO; GO:0005524; F:ATP binding; IEA.
 DR GO; GO:0016301; F:kinase activity; IEA.

DR GO; GO:00006468; P:protein amino acid phosphorylation; IEA.
 DR GO; GO:0001680; P:two-component signal transduction system (p...); IEA.
 DR InterPro; IPR003594; Arbind APIbase.
 DR InterPro; IPR005467; HIS_kinase.
 DR InterPro; IPR003661; HIS_kin_N.
 DR InterPro; IPR004358; HIS_kin_Like_C.
 DR InterPro; IPR001610; PAC_.
 DR InterPro; IPR000014; PAS_.
 DR InterPro; IPR007001; PAS-assoc_C.
 DR NUCLEOTIDE SEQUENCE
 RP Bueli C.R., Yuan Q., Ouyang S., Moffat K.S., Hill J.N., Gansberger K.,
 RA Brenner M., Burgess S., Hance M., Shvartsbeyn M., Tsitlin T.,
 RA Riggs F., Hsiao J., Zisman V., Blunt S., Pai G., Vanaken S.E.,
 RA Utterback T.P., Feldblum T.V., Quackenbush J., Salzberg S.E.,
 RA White O., Fraser C.M.;
 RL Submitted (FEB-2001) to the EMBL/GenBank/DBJ databases.
 [2] NUCLEOTIDE SEQUENCE
 RP Bueli R.;
 RL Submitted (JUL-2002) to the EMBL/GenBank/DBJ databases.
 DR EMBL; AC087852; AAK71566.1; -; Genomic_DNA.
 HSSP P08581; 1R1W.

DR Gramene; Q94GN1; -

DR GO:0005524; F:ATP binding; IEA.
 DR GO:0004674; F:protein serine/threonine kinase activity; IEA.
 DR GO:0004674; F:protein amino acid phosphorylation; IEA.
 DR InterPro; IPR00719; Prot kinase.
 DR InterPro; IPR08271; Ser_Thr_Pkin_AS.
 DR PROSITE; PS50011; PROTEIN_KINASE_DOM; 1.
 DR PROSITE; PS50018; PROTEIN_KINASE_ST; 1.
 KW Hypothetical protein.
 SQ SEQUENCE 712 AA; 79069 MW; 094CD5076650F901 CRC64;

Query Match 73.5%; Score 36; DB 2; Length 712;
 Best Local Similarity 60.0%; Pred. No. 2.4e+02;
 Matches 6; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSFSGVAVS 10
 DR 1 HSFSGVAVS 10
 Db 91 HMFAGTAEV 100

RESULT 22
 Q7PFB4_ANOGA
 ID Q7PFB4_ANOGA PRELIMINARY;
 AC Q7PFB4;
 DT 01-MAR-2004 (TREMBLrel. 26; Created)
 DT 01-MAR-2004 (TREMBLrel. 26; Last sequence update)
 DE ENSAANGP0000007937 (Fragment).
 RN STRAIN=PEST; SEQUENCE.
 RC Anopheles gambiae str. PEST.
 RA Submitted (APR-2003) to the EMBL/GenBank/DBJ databases.
 OS Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Culicoidea; Culicidae;
 OC Neoptera; Endopterygota; Diptera; Nematocera; Culicidae;
 OC Anophelinae; Anopheles.
 OC NCBI_TaxID=180454;
 OC OX NCBI_AAA01098987; EAA01044.1; -; Genomic_DNA.
 DR EMBL; AAA01098987; EAA01044.1; -; Genomic_DNA.
 DR GO; GO:0048037; F:cofactor binding; IEA.
 DR GO; GO:0016491; F:oxidoreductase activity; IEA.
 DR GO; GO:0016740; F:transferase activity; IEA.
 DR GO; GO:000270; F:zinc ion binding; IEA.
 DR GO; GO:00061633; F:fatty acid biosynthesis; IEA.
 DR GO; GO:00081152; P:metabolism; IEA.
 DR InterPro; IPR009081; AC_P like.
 DR InterPro; IPR001227; AC_Transferase.
 DR InterPro; IPR002198; ADH_short.
 DR InterPro; IPR02085; C:membrane; IEA.
 DR InterPro; IPR001525; C5_DNA_meth.
 DR InterPro; IPR000794; Ketoadyl_synth.

DR InterPro; IPR006163; Phopanteth_bind.
 DR Pfam; PF00698; Acyl_transf_1; 1.
 DR Pfam; PF00106; adh_short_1; 1.
 DR Pfam; PF00107; ADH_zinc_N; 1.
 DR Pfam; PF00109; ketoacyl_synt; 1.
 DR Pfam; PF02801; ketoacyl_synt_C; 1.
 DR PROSITE; PS50075; ACP_DOMAIN_-1.
 DR PROSITE; PS00006; B_KETOCYL_SYNTHASE; 1.
 DR PROSITE; PS00095; C5_MITASE_2; UNKNOWN_1.
 DR PROSITE; PS00095; C5_MITASE_2; UNKNOWN_1.
 KW Transferase.
 FT NON TER 2232 2232
 SQ SEQUENCE 2232 AA; 245912 MW; FB38D692F96D1136 CRC64;
 Query Match 73 5%; Score 36; DB 2; Length 2232;
 Best Local Similarity 60 0%; Pred. No. 7.9e+02;
 Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 Qy 1 HSFGVAVSE 10
 Db 526 HSFGVIAAVQ 535

RESULT 23
 ID 001677_BOMMO
 AC 001677;
 DT 01-JUL-1997 (TREMBLrel. 04, Created)
 DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
 DE P260.
 OS Bombyx mori (Silk moth).
 OC Neoptera; Endopterygota; Lepidoptera; Glosata; Diptrysia; Bombycoidea;
 OC Neoptera; Endopterygota; Arthropoda; Hexapoda; Insecta; Pterygota;
 OC Bombycidae; Bombyx.
 RN [1]
 RP STRAIN=Kin-shu x Sho-wa;
 RA Deno K.;
 RL Submitted (AUG-1996) to the EMBL/Genbank/DBJ databases.
 DR EMBL; U67866; AA053257.1; -; mRNA.
 DR PIR; TI8200; TI8200.
 DR GO; GO:0004024; F:alcohol dehydrogenase activity, zinc-dependent; IEA.
 DR GO; GO:0016740; F:transferase activity; IEA.
 DR GO; GO:0008210; F:zinc ion binding; IEA.
 DR GO; GO:0006633; P:fatty acid biosynthesis; IEA.
 DR GO; GO:0008152; P:metabolism; IEA.
 DR InterPro; IPR001227; Ac transferase.
 DR InterPro; IPR000794; Ketoacyl_synth.
 DR Pfam; PF00698; Acyl_transf_1; 1.
 DR Pfam; PF00109; ketoacyl_synt_C; 1.
 DR PROSITE; PS00006; B_KETOCYL_SYNTHASE; 1.
 SQ SEQUENCE 2342 AA; 262352 MW; A9052B8DAB9F05A9 CRC64;

Query Match 73 5%; Score 36; DB 2; Length 2342;
 Best Local Similarity 60 0%; Pred. No. 8.3e+02;
 Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 Qy 1 HSFGVAVSE 10
 Db 583 HSFGVIAAVQ 592

RESULT 24
 FABZ_MANSM
 ID FABZ_MANSM STANDARD; PRT; 150 AA.
 AC 065753;
 DT 10-MAY-2005 (Rel. 47, Created)
 DT 10-MAY-2005 (Rel. 47, Last sequence update)
 DT 10-MAY-2005 (Rel. 47, Last annotation update)
 DE (3R)-hydroxymyristoyl-[acyl carrier protein] dehydratase (EC 4.2.1.-)
 DE (3R)-hydroxymyristoyl ACP dehydratase (EC 4.2.1.-)

GN Name=fabZ; OrderedLocusNames=MS0460;
 OS Mannheimia succiniciproducens (strain MBELSE).
 OC Bacterium; Proteobacteria; Gammaproteobacteria; Pasteurellales;
 OC Pasteurellaceae; Mannheimia.
 NCBI_TaxID=221988;
 RN [1]
 RP NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA].
 RX PubMed=15378067; DOI=10.1038/nbt.1010;
 RA Hong S.H., Kim J.S., Lee S.Y., In Y.H., Choi S.S., Rih J.-K., Kim C.H., Jeong H., Hur C.G., Kim J.-J.; RT "The genome sequence of the capnophilic rumen bacterium Mannheimia succiniciproducens";
 RL Nat. Biotechnol. 22:1275-1281 (2004).
 CC -!- FUNCTION: Involved in saturated fatty acids biosynthesis.
 CC -!- SUBCELLULAR LOCATION: Cytoplasmic (By similarity).
 CC -!- SIMILARITY: Belongs to the thioester hydrolase family.
 CC This Swiss-Prot entry is copyright. It is produced through collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not removed.
 CC
 DR EMBL; AE016327; AAU37067.1; -; Genomic_DNA.
 DR HAMAP; MF_00406; -; 1.
 DR InterPro; IPR010684; FabZ.
 DR TIGRFAMS; MTGR01250; fabZ; 1.
 KW Complete proteome; Lipid A biosynthesis; Lipid synthesis; Lyase.
 ACT SITE 57 By similarity.
 SQ SEQUENCE 150 AA; 16861 MW; 5274EAA5EC20637B CRC64;
 Query Match 71 4%; Score 35; DB 1; Length 150;
 Best Local Similarity 77.8%; Pred. No. 77;
 Matches 7; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
 Qy 2 SFSGVAVSE 10
 Db 128 SFTGVAVSD 136

RESULT 25
 Q819P1_PSOOV PRELIMINARY;
 ID Q819P1_PSOOV PRELIMINARY;
 AC Q819P1;
 DT 01-MAR-2003 (TREMBLrel. 23, Created)
 DT 01-MAR-2003 (TREMBLrel. 23, Last sequence update)
 DT 01-MAR-2004 (TREMBLrel. 26, Last annotation update)
 DE Derp1 antigen (Fragment).
 OS Psoroptes ovis (Sheep scab mite).
 OC Eukaryota; Metazoa; Arthropoda; Chelicerata; Arachnida; Acarida; OC Psoroptidae; Sarcoptiformes; Astigmata; Psoroptidae.
 OC Psoroptidae; Psoroptidae.
 NCBI_TaxID=83912;
 RN [1]
 RP NUCLEOTIDE SEQUENCE.
 RX PubMed=22394898; PubMed=12406195;
 RX DOI=10.1046/j.1365-2022.2002.00480.x;
 RA Lee A.J., Machell J., Van Den Brook A.H.M., Nisbet A.J., Miller H.R.P., Isaac R.E., Huntley J.F.;
 RA RT "Identification of an antigen from the sheep scab mite Psoroptes ovis, homologous with house dust mite group I allergens.";
 RL Parasite Immunol. 24:413-422 (2002).
 CC -!- SIMILARITY: Belongs to the Peptidase C1 family.
 DR EMBL; AF439854; AA014671.1; -; mRNA.
 DR HSSP; PI4080; 1YAL.
 DR MEROPS; C01-073;-
 DR GO; GO:0004197; P:cysteine-type endopeptidase activity; IEA.
 DR InterPro; IPR006508; P:proteolysis and peptidolysis; IEA.
 DR PRO0006668; Peptidase C1.
 DR InterPro; IPR00169; Peptidase C1.
 DR Pfam; PF000158; Peptidase C1; 1.
 DR Prodrom; P0000158; Peptidase C1; 1.
 DR SMART; SM00645; Pept_C1; 1.

DR	PROSITE; PS00139; THIOL_PROTEASE_CYS; 1.	SQ	SEQUENCE	323 AA;	35542 MW;	F1FD68B798032FD6 CRC64;
FT	1	FT	263	263	FT	Non_TER
FT	263 AA;	FT	29576 MW;	BF6DD21006DAB5B0 CRC64;	SQ	SEQUENCE
Query Match	71.4%;	Score	35;	DB 2;	Length	263;
Best Local Similarity	77.8%;	Pred.	No. 1.4e+02;		Mismatches	1;
Matches	7;	Conservative	2;	Mismatches	0;	Indels
Qy	2 SFSGVAVSE 10	O	Gaps	0;		
Db	124 AFSGVAVSE 132	D				
RESULT 28						
Q59UH0_CANAL	Q59UH0_CANAL PRELIMINARY;	PRT;	361 AA.			
ID	Q59UH0;	AC	Q59UH0;			
AC	Q59UH0;	DT	10-MAY-2005 (TREMBLrel. 30, Created)			
AC	Q59UH0;	DT	10-MAY-2005 (TREMBLrel. 30, Last sequence update)			
DT	01-MAR-2003 (TREMBLrel. 23, Created)	DT	10-MAY-2005 (TREMBLrel. 30, Last annotation update)			
DT	01-OCT-2003 (TREMBLrel. 23, Last sequence update)	DT	10-MAY-2005 (TREMBLrel. 30, Last annotation update)			
DT	01-OCT-2003 (TREMBLrel. 25, Last annotation update)	DE	Potential zinc-binding dehydrogenase.			
DE	NAD/NADP transhydrogenase beta subunit.	GN	Name=FZD1; ORFNames=Cao19.2394;			
DE	OrderedLocusNames=VV20316;	OS	Candida albicans SC5314.			
OS	Vibrio vulnificus.	OC	Eukaryota; Fungi; Ascomycota; Saccharomycetes; Saccharomyctales; mitosporic Saccharomyctales; Candida.			
OC	Bacteria; Proteobacteria; Gammaproteobacteria; Vibionales; Vibrionaceae; Vibrio.	OX	NCBI_TaxID=237561;			
OX	NCBI_TaxID=672;	RN	[1]			
RN	NUCLEOTIDE SEQUENCE.	RP	STRAIN=SC5314;			
RP	STRAIN=CMCP6;	RC	Jones T., Federici N.A., Chibana H., Dungan J., Kalman S., Magee P.T.,			
RC	Rhee J.H., Kim S.Y., Chung S.S., Kim J.J., Moon Y.H., Jeong H.,	RA	RA Mages B.B., Newport G., Thorstenson Y.R., Agabian N., Magee P.T.,			
RA	Choy H.E.;	RA	RA Davis R.W., Scherer S.;			
RA	RT "Complete genome sequence of <i>Vibrio vulnificus</i> CMCP6.";	RA	RA Jones T., Scherer S., Agabian N.;			
RT	Submitted (DEC 2002) to the EMBL/GenBank/DBJ databases.	RA	RA Roberts J., Persson K., Donnelly S., Favorito S., Tzung K.-W., Jones T., Scherer S., Agabian N.;			
RL	EMBL:AE016809; AAC0027261; -; Genomic_DNA.	RA	RA "Annotation of the Genome of <i>Candida albicans</i> ".			
DR	HSSP_P1024; 1D4O.	RA	RA Submitted (APR-2004) to the EMBL/GenBank/DBJ databases.			
DR	GO:0008746; F:NAD(P) transhydrogenase activity; IEA.	RA	-!- CAUTION: The sequence shown here is derived from an EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is preliminary data.			
DR	GO:0006118; P:electron transport; IEA.	CC	CC DR EMBL: AACQ01000131; EAK94110.1; -; Genomic DNA.			
DR	InterPro:IPR04003; PNT_beta.	CC	CC SQ SEQUENCE 361 AA; 39379 MW; 50CD2373DA5FEC07 CRC64;			
DR	Pfam:PF02233; PNTB; 1.	DR	DR SQ SEQUENCE 361 AA; 39379 MW; 50CD2373DA5FEC07 CRC64;			
KW	Complete proteome.	DR	DR SQ SEQUENCE 361 AA; 39379 MW; 50CD2373DA5FEC07 CRC64;			
DR	Complex proteome.	DR	DR SQ SEQUENCE 361 AA; 39379 MW; 50CD2373DA5FEC07 CRC64;			
DR	32450 MW;	DR	DR SQ SEQUENCE 361 AA; 39379 MW; 50CD2373DA5FEC07 CRC64;			
SQ	308 AA;	DR	DR SQ SEQUENCE 361 AA; 39379 MW; 50CD2373DA5FEC07 CRC64;			
Query Match	71.4%;	Score	35;	DB 2;	Length	308;
Best Local Similarity	66.7%;	Pred.	No. 1.6e+02;			
Matches	6;	Conservative	3;	Mismatches	0;	Indels
Qy	1 HSFGVAVS 9	O	Gaps	0;		
Db	51 HSPAGMAV 59	D				
RESULT 27						
Q9ZG15_RHOER	Q9ZG15_RHOER PRELIMINARY;	PRT;	323 AA.			
ID	Q9ZG15;	AC	Q9ZG15;			
AC	Q9ZG15;	DT	01-MAY-1999 (TREMBLrel. 10, Created)			
AC	Q9ZG15;	DT	01-MAY-1999 (TREMBLrel. 10, Last sequence update)			
AC	Q9ZG15;	DT	01-OCT-2003 (TREMBLrel. 25, Last annotation update)			
DB	Hypothetical protein.	DB	Rhodococcus erythropolis			
OS	Rhodococcus erythropolis	OS	Bacteria; Actinobacteridae; Actinomycetales;			
OC	Corynebacterineae; Nocardiaceae; Rhodococcus.	OC	OC Corynebacterineae; Nocardiaceae; Rhodococcus.			
OC	NCBI_TaxID=1833;	OC	OC NCBI_TaxID=1833;			
OX	NUCLEOTIDE SEQUENCE.	OX	OX MEDLINE=N9844039; PubMed=9765579;			
RP	STRAIN=N9844039;	RP	RP J. Bacteriol. 180:5448-5453 (1998).			
RA	"The 20S proteasome of <i>Streptomyces coelicolor</i> .;"	RA	RA AF08800; AAC8687.1; -; Genomic_DNA.			
RA	AF08800; AAC8687.1; -; Genomic_DNA.	RW	RW Hypothetical protein.			
RA	RT	RT				
RA	J. Bacteriol. 180:5448-5453 (1998).	RL				
RL	EMBL:AF08800; AAC8687.1; -; Genomic_DNA.	DR				
KW		RX				
RESULT 28						
Q59UH0_CANAL	Q59UH0_CANAL PRELIMINARY;	PRT;	361 AA.			
ID	Q59UH0;	AC	Q59UH0;			
AC	Q59UH0;	DT	10-MAY-2005 (TREMBLrel. 30, Created)			
AC	Q59UH0;	DT	10-MAY-2005 (TREMBLrel. 30, Last sequence update)			
AC	Q59UH0;	DT	10-MAY-2005 (TREMBLrel. 30, Last annotation update)			
AC	Q59UH0;	DE	Potential zinc-binding dehydrogenase.			
GN	Name=FZD1; ORFNames=Cao19.2394;	GN	Candida albicans SC5314.			
GN	NCBI_TaxID=237561;	GN	NCBI_TaxID=237561;			
RN	[1]	RN				
RP	NUCLEOTIDE SEQUENCE.	RP				
RC	STRAIN=SC5314.	RC				
RX	PubMed=15123810;	RX				

RA	Jones T., Pedersen N.A., Chibana H., Dungan J., Kalman S., Margee P.T.,	Q9V233_DROME PRELIMINARY;	PRT;	557 AA.
RA	Margee B.B., Newport G., Thorstenson Y.R., Agabian N.,			
RA	Davis R.W., Scherer S.;			
RT	"The diploid Genome sequence of <i>Candida albicans</i> ";			
RL	Proc. Natl. Acad. Sci. U.S.A. 101:7329-7334 (2004).			
RN	[2]			
RP	NUCLEOTIDE SEQUENCE.			
RC	STRAIN=SC5314;			
RA	Dungan J., Kuo A., Newport G., Lan C.-Y., Iijima C., Adegbola O.,			
RA	Roberts J., Persson K., Donnelly S., Favoreto S., Tsung K.-W.,			
RA	Jones T., Scherer S., Agabian N.,			
RT	"Annotation of the Genome of <i>Candida albicans</i> ";			
RL	Submitted (APR-2004) to the EMBL/GenBank/DDBJ databases.			
CC	-!- CAUTION: The sequence shown here is derived from an EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which is CC preliminary data.			
DR	EMBL; AAC00100130; EAK94161.1; -; Genomic DNA.			
SQ	SEQUENCE 361 AA; 39562 MW; ALR98632P7CBA7 CRC64;	0;	Gaps	0;
Query Match	Best Local Similarity 71.4%; Score 35; DB 2; Length 361;			
Matches 6; Conservative 6; MiSmatches 1; MisMatches 2; Indels 0; Gaps 0;				
Qy	1 HSFGVASY 9			
Db	128 HSFGVASY 136			
RESULT 30				
QTPGI6_ANOGA				
ID QTPGI6_ANOGA PRELIMINARY;		PRT;	413 AA.	
AC QTPGI6_				
DT 01-MAR-2004 (TREMBLrel. 26, Created)				
DT 01-MAR-2004 (TREMBLrel. 26, Last sequence update)				
DE ENSANGP00000024843 (Fragment).				
GN ORFNames=ENSANGP00000024873;				
OS Anopheles gambiae str. PEST.				
OC Eukaryota; Metazoa; Arthropoda; Hexapoda; Insecta; Pterygota; OC				
Anophelinae; Anopterous; Diptera; Nematocera; Culicidae; Anopheles.				
RN [1]				
RP NUCLEOTIDE SEQUENCE.				
RC STRAIN=PEST;				
RG The <i>Anopheles gambiae</i> Sequence Committee;				
RT "Anopheles gambiae re-annotation.";				
RL Submitted (APR-2002) to the EMBL/GenBank/DDBJ databases.				
RN				
RP NUCLEOTIDE SEQUENCE.				
CC STRAIN=PEST.				
RG The <i>Anopheles gambiae</i> Sequence Committee;				
RT "Anopheles gambiae re-annotation.";				
RL Submitted (APR-2004) to the EMBL/GenBank/DDBJ databases.				
CC -!- CAUTION: The sequence shown here is derived from an EMBL/GenBank/DDBJ whole genome shotgun (WGS) entry which is CC preliminary data.				
DR EMBL; AAA801008659; EAA44919.2; -; Genomic DNA.				
DR GO:0003824 F:catalytic activity; IEA.				
DR InterPro; IPR000379; Ser_estracs.				
FT NON_TER				
SEQUENCE 413 AA; 46354 MW; 9DE43CF8900215B6 CRC64;				
CC Query Match Best Local Similarity 71.4%; Score 35; DB 2; Length 413;				
CC Matches 6; Conservative 6; MiSmatches 2; Indels 0; Gaps 0;				
Qy 1 HSFGVASY 10				
Db 297 HSFGVASY 306				
RESULT 31				
Q9V233_DROME				

RL	Genome Biol. 3:RESEARCH0084.1-RESEARCH0084.20 (2002).	RA Nicaud S., Jaffe D., Fisher S., Lutfalla G., Doseat C., Segurens B., Dasilva C., Salanoubat M., Levy M., Bouet N., Castellano S., Anthouard V., Jubin C., Castelli V., Karinika M., Vacherie B., MEDLINE=22426059; PubMed=12537572;
RP	NUCLEOTIDE SEQUENCE.	RA BIenouard C., Skalli Z., Cattolico L., Poulaire J., De Bernardis V., RX Hradec P., Campbell K.S., Campbell C.J., Matthews B.B., Matluburn G.H., Prochnik S.E., RA Misra S., Crossby M.A., Kaminker J.S., Millburn G.J., Byraktaroglu L., Berman B.P., RA Smith C.D., Tupy J.L., Whitfield E.J., Chapple C., McKernan K.J., McEwan P., Bosak S., RA Bettencourt B.R., Celinker S.E., de Schroeder A.J., Drysdale R.A., RA Harris N.L., Richter J., Russo S., Grey A.D.N.J., Zody M.C., Mesirov J., RA Lindblad-Toh K., Birren B., Nusbaum C., Kahn D., Robinson-Rechavi M., RA Laudet V., Schachter V., Quétier F., Saurin W., Scarpelli C., RA Wincker P., Lander E.S., Weissenbach J., Roest Crollius H., RA "Genome duplication in the teleost fish Tetraodon nigroviridis reveals RT the early vertebrate proto-karyotype.", RT Nature 431:946-957(2004). RT RN
RL	Genome Biol. 3:RESEARCH0083.1-RESEARCH0083.22 (2002).	RN [12]
RN	NUCLEOTIDE SEQUENCE.	RP NUCLEOTIDE SEQUENCE.
RP	Whitehead Institute Centre for Genome Research;	RG Genoscope; Whitehead Institute Centre for Genome Research;
RG	Submitted (FBP-2004) to the EMBL/GenBank/DBJ databases.	RL Submitted (FBP-2004) to the EMBL/GenBank/DBJ databases.
RA	Celniker S., Carlson J., Wan K., Pfeiffer B., Frise E., George R., Hoskins R., Strubleton M., Pacieb J., Park S., Svirska R., Smith B., RA Yu C., Rubin G.; RT "Drosophila melanogaster release 4 sequence.", RT Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.	CC -!- CAUTION: The sequence shown here is derived from an EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is preliminary data.
RA	EMBL: CAEB01014738; CRC64;	DR EMBL: CAEB01014738; CAG04389.1; -; Genomic DNA.
RL	NUCLEOTIDE SEQUENCE.	PT NON_TER 1 1
RN	FLYBase;	PT NON_TER 1176 1176 AA; MW: 70CF69BBCB8193B5 CRC64;
RP	Submitted (MAR-2000) to the EMBL/GenBank/DBJ databases.	SQ SEQUENCE 1176 AA; 131745 MW:
DR	EMBL: AE003485; AAF:7996.2; -; Genomic DNA.	Query Match 71.4%; Score 35; DB 2; Length 1176;
DR	Ensembl: CG1961; Drosophila melanogaster.	Best Local Similarity 70.0%; Pred. No. 6.5e+02;
DR	Flybase: FBgn0030264; CG1961.	Matches 7; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
GO	GO:0004519; F: endonuclease activity; IEA.	Qy 1 HSFGVAVSE 10
GO	GO:0016787; F: hydrolase activity; IEA.	Db 626 HSFRGKVKEV 635
DR	GO:000166; F:nucleotide binding; IEA.	RESULT 33
DR	GO:0006283; P:DNA repair; IEA.	Q5XK85 XENLA ID Q5XK85_XENLA PRELIMINARY;
DR	GO:0009166; P:nucleotide catabolism; IEA.	AC Q5XK85;
DR	InterPro: IPR008334; 5'-Nucleotidase_C.	DT 25-OCT-2004 (TREMBLrel. 28, Created)
DR	InterPro: IPR006146; 5'-Nucleotidase_N.	DT 25-OCT-2004 (TREMBLrel. 28, Last sequence update)
DR	InterPro: IPR006179; 5'-nucleotidase.	DB Loc94850 protein.
DR	PFam: PF03872; 5'nucleotidase_C_1.	GN Name=LOC94850;
DR	PROSITE: PS00149; Metallophos_1.	OS Xenopus laevis (African clawed frog).
DR	PRINTS: PR01607; APYRASE_FAMILY.	OC Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; OC Amphibia; Batrachia; Anura; Mesobatrachia; Pipoidea; Pipidae;
DR	PROSITE: PS00785; 5'-NUCLEOTIDASE_1; UNKNOWN_1.	OC Xenopodinae; Xenopus; Xenopus.
SQ	SEQUENCE 557 AA; 61062 MW;	OX NCBI_TaxID=8355;
DR	Query Match 71.4%; Score 35; DB 2; Length 557;	RN [11] -
DR	Best Local Similarity 70.0%; Pred. No. 3e+02;	RP NUCLEOTIDE SEQUENCE.
DR	Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;	RC TISSUE=Embryo;
DR	Query Match 71.4%; Score 35; DB 2; Length 557;	RX MEDLINE=22341132; PubMed=12454917; DOI=10.1002/dvdy.10174;
DR	Best Local Similarity 70.0%; Pred. No. 3e+02;	RA Klein S.L., Strausberg R.L., Wagner L., Pontius J., Clifton S.W., Richardson P.;
DR	Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;	RT "Genetic and genomic tools for Xenopus research: The NIH Xenopus initiative", RT Dev. Dyn. 225:1384-391 (2002).
DR	Query Match 71.4%; Score 35; DB 2; Length 557;	RL Dev. Dyn. 225:1384-391 (2002).
DR	Best Local Similarity 70.0%; Pred. No. 3e+02;	RN [12]
DR	Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;	RP NUCLEOTIDE SEQUENCE.
DR	Query Match 71.4%; Score 35; DB 2; Length 557;	RC TISSUE=Embryo;
DR	Best Local Similarity 70.0%; Pred. No. 3e+02;	RX MEDLINE=22388357; PubMed=12477932; DOI=10.1073/pnas.242603899;
DR	Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;	RA Strausberg R.L., Peingold E.A., Grouse L.H., Derge J.G., RA Altchul S.F., Zeeberg B., Buetow K.H., Marusina K., Max S.I., Wang J.A., Bhat N.K., RA Hopkins R.P., Jordan H., Moore T., Rubin G.M., Hong L., RA Diatchenko L., Soares M.B., Bonaldo M.F., Casavant T.L., Scheetz T.E., RA Stapleton M., Brownstein M.J., Usdin T.B., Toshiyuki S., Carninci P., Prange C., RA Raha S.S., Loqueland N.A., Peters G.J., Abramson R.D., Mullany S.J., RA Bosak S.A., McEwan K.J., McKernan K.J., Malek J.A., Gunaratne P.H., RA Richards S., Worley K.C., Hale S., Garcia A.M., Gay L.J., Hulyk S.W., RA Villalon D.K., Muzny D.M., Sodergren E.J., Lu X., Gibbs R.A., RA Fahey J., Helton E., Kettman M., Madan A., Rodriguez S., Sanchez A., RA

RA Whiting M., Madan A., Young A.C., Shevchenko Y., Bouffard G.G., Blakesley R.W., Touchman J.W., Green E.D., Dickson M.C., Rodriguez A.C., Grinwood J.J., Schmutz J., Myers R.M., Rodriguez Y.S.N., Krzywinski M., Skalska U., Smalls D.E., Scherzer A., Schein J.E., Jones S.J.M., Marra M.A., "Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences"; Proc. Natl. Acad. Sci. U.S.A. 99:16899-16903 (2002).

RN [2] FUNCTION AND MUTANT PTR1-1; RX PubMed=15094387; DOI=10.1016/j.bbrc.2004.03.171;

RA Andoh T., Azad A.K., Shigematsu A., Ohshima Y., Tani T.; RT "The fission yeast *ptr1* gene involved in nuclear mRNA export encodes a putative ubiquitin ligase."; RL Biochem. Biophys. Res. Commun. 317:1138-1143 (2004).

CC -!- FUNCTION: Probable ubiquitin ligase protein involved in mRNA export. E3 ubiquitin ligase protein mediate ubiquitination and subsequent proteasomal degradation of target proteins. Probably participates in mRNA export from the nucleus by regulating the transport of hnRNP proteins such as rael.

CC -!- PATHWAY: Ubiquitin conjugation; third step.

CC -!- SUBCELLULAR LOCATION: Nuclear.

CC -!- SIMILARITY: Belongs to the TOM1/PRP1 family.

CC -!- SIMILARITY: Contains 1 HECT (B6AP-type E3 ubiquitin-protein ligase) domain.

CC This Swiss-Prot entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation - the European Bioinformatics Institute. There are no restrictions on its use as long as its content is in no way modified and this statement is not removed.

CC ENBL: Z99531; CAB16714.1; -; Genomic_DNA.

DR PIR: T37964 ; T37964 .

DR HSSP: Q05086; 1C4Z.

DR GenDB_Spombe; SPAC19D5.04; -.

DR GO:GO:0006406; P:mRNA-nucleus export; IMP.

DR InterPro; IPR010309; DUF908_ubiq_lig.

DR InterPro; IPR010314; DUF913_Ubiquin_lig.

DR PFAM; PF06012; DUF908; 1.

DR PFAM; PF06025; DUF913; 1.

DR SMART; SM00119; HECTC1.

DR PROSITE; PS50237; HECTC1.

DR Complete proteome; Ligase; mRNA transport; Nuclear protein; Transport; KW Ubl conjugation pathway.

FT DOMAIN 2891 3227 HECT.

FT COMPIAS 1854 2017 Arg-rich.

FT ACT_SITE 3194 3194 Glycyl thioester intermediate (By similarity).

FT MUTAGEN 2887 2887 L->Q: In ptt1-1; induces defects in mRNA export.

FT SEQUENCE 3227 AA; 36503 MW; 07C47AB79124575 CRC64;

RESULT 34

PTR1_SCPHO

ID PTR1_SCPHO STANDARD; PRT; 3227 AA.

DT 25-OCT-2004 (Rel. 45, Created)

DT 10-MAY-2005 (Rel. 47, Last annotation update)

DE E3 ubiquitin protein ligase ptr1 (EC 6.3.2.-) (Poly(A) + RNA transport protein 1).

GN Name=ptr1; ORFNames=SPAC19D5.04;

OS Schizosaccharomyces pombe (Fission yeast).

OC Fungi; Fungi1; Ascomycota; Schizosaccharomyces;

OC Schizosaccharomyctetes; Schizosaccharomyctaceae;

NCBI_TAXID=4896;

RN [1]

RP NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA].

RC STRAIN=972;

RX MEDLINE=21648401; PubMed=11859360; DOI=10.1038/nature0724;

RA Wood V., Guilliam R., Rajandream M.A., Lyne M.H., Lyne R., Stewart A., Sgouros J.G., Peat N., Hayles J., Baker S.G., Basham D., Bowman S., Brooks K., Brown D., Brown S., Chillingworth T., Churcher C.M., Collins M., Connor R., Cronin A., Davis P., Feltwell T., Fraser A., Gentles S., Göbel A., Hamlin N., Howarth S., Harris D.E., Hidalgo J., Holroyd S., Hornsby T., Hunt S., Huckle E.J., Hunt S., Jagels K., James K.D., Jones L., Jones M., Leather S., McDonald S., McLean J., Mooney P., Moule S., Mungall K.L., Murphy D.J., Niblett D., Odell C., Oliver K., O'Neill S., Pearson D., Quail M.A., Rabbowitsch E., Rutherford K.M., Rutter S., Saunders D., Seeger K., Sharp S., Skelton J., Simmonds M.N., Squares R., Squares S., Stevens K., Taylor K., Taylor R.G., Tilney A., Walsh S.V., Warren T., Whitehead S., Woodward J.R., Volckaert G., Aert R., Robben J., Grymonpre B., Weltens I., Vanstreels E., Rieger M., Schaerer M., Mueller-Auer S., Gabel C., Fuchs M., Duesterhoeft A., Fritze C., Holzer E., Moestl D., Hilbert H., Borzym K., Langer I., Beck A., Lehrach H., Reinhardt R., Pohl T.M., Eger P., Zimmermann W., Wedler H., Wambutt R., Purnelle B., Goffeau A., Cadieu B., Dreano S., Gloux S., Delaure V., Mottier S., Gallibert F., Aves S.J.J., Xiang Z., Hunt C., Moore K., Hurst S.M., Lucas M., Rochet M., Gailhard C., Tallada V.A., Garzon A., Thode G., Daga R.R., Cruzado L., Jimenez J., Sanchez M., del Rey F., Benito J., Dominguez A., Revuelta J.L., Moreno S., Armstrong J., Forburg S.L., Cerutti L., Lowe T., McCombie W.R., Paulsen I., Porashkin J., Shpakovski G.V., Usberry D., Barrell B.G., Nurse P.;

RA "The Genome Sequence of Schizosaccharomyces pombe.";

RT Nature 415:871-880 (2002).

RA	Jacques R.J., Brinkac L.M., DeBoy R.T., Parker C.T., Daugherty S.C., Durkin A.S., Madupu R., Sullivan S.A., Schatz M.C., Badger J.H., Fraser C.M., Nelson K.E., Ayodeji M.A., Shvartsbeyn A.A., Sodergren E., Baca E., Gebregeorgis B., McLeod M.P., Smalls D., Xiang Q., Fraser C.M., Weinstock G.M., Norris S.J., Paulsen I.T., "Comparison of the genome of the oral pathogen <i>Treponema dentitcola</i> with other spirochete genomes", Proc. Natl. Acad. Sci. U.S.A. 101:5646-5651 (2004).
RT	"Major structural and novel potential virulence mechanisms from the genomes of multiple <i>Campylobacter</i> species"; Submitted (DEC-2004) to the EMBL/Genbank/DBJ databases.
RL	- CAUTION: The sequence shown here is derived from an preliminary data.
CC	EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is preliminary data.
DR	EMLB: AAFK01000003; BAL054709.1; -; Genomic DNA.
SQ	SEQUENCE 132 AA; 15088 MW; A23FCDBA8D050BD0 CRC64;
Query Match	69.4%; Score 34; DB 2; Length 132;
Best Local Similarity	60.0%; Pred. No. 1.1e+02;
Matches	6; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
Qy	1 HSFGVAVSE 10
Db	70 HKLDGVASIE 79
RESULT 36	Q9YBW4 AERPE
ID	Q9YBW4_AERPE PRELIMINARY;
AC	PRT; 197 AA.
DT	01-NOV-1999 (TREMBLrel. 12, Created)
DT	01-NOV-1999 (TREMBLrel. 12, Last sequence update)
DT	01-JUN-2003 (TREMBLrel. 24, Last annotation update)
DE	Hypothetical protein APE1486.
GN	OrderedLocusNames=APE1486;
OS	Aeropyrum pernix.
OC	Archaea: Crenarchaeota: Thermoprotei: Desulfurococcales: Desulfurococcaceae; Aeropyrum.
QC	NCBI_TAXID=56636;
OX	[1] _
RN	NUCLEOTIDE SEQUENCE.
RP	
RC	STRAIN=K1;
RA	MEIDLINE=93110339; PubMed=10382966;
RA	Kawarabayasi Y., Hino Y., Horikawa H., Yamazaki S., Haikawa Y., Ankai M., Sekine M., Baba S.-I., Ankai A., Kosugi H.,
RA	Hosoyama A., Fukui S., Nagai Y., Nishihima K., Nakazawa H., Takamiya M., Masuda S., Funhashi T., Tanaka T., Kudo H., Yamaizaki J., Kusubida N., Oguchi A., Aoki K.-I., Kubota K., Nakamura Y., Nomura N., Sako Y., Kikuchi H.,
RT	"Complete genome sequence of an aerobic hyper-thermophilic crenarchaeon, <i>Aeropyrum pernix</i> K1"; DNA Res. 6:83-101(1999).
RL	DR; BA000002; BAA80484.1; -; Genomic_DNA.
DR	PIR; PIR2628; F2628.
KW	Complete proteome; Hypothetical protein.
SQ	SEQUENCE 197 AA; 21009 MW; 149B82A25GCC1B55 CRC64;
Query Match	69.4%; Score 34; DB 2; Length 197;
Best Local Similarity	75.0%; Pred. No. 1.6e+02;
Matches	6; Conservative 2; Mismatches 0; Indels 0; Gaps 0;
Qy	2 SPFGVAVS 9
Db	125 SPFGIASTI 132
RESULT 37	Q73LG1 TREDE
ID	Q73LG1_TREDE PRELIMINARY;
AC	PRT; 212 AA.
DT	05-JUL-2004 (TREMBLrel. 27, Created)
DT	05-JUL-2004 (TREMBLrel. 27, Last sequence update)
DT	05-JUL-2004 (TREMBLrel. 27, Last annotation update)
DE	Membrane protein, putative.
GN	OrderedLocusName=TDE1903;
OS	Treponema dentitcola.
OC	Bacteria; Spirochaetes; Spirochaetales; Spirochaetaceae; Treponema.
OX	NCBI_TAXID=158;
RN	NUCLEOTIDE SEQUENCE; STRAIN=ATCC 35405 / DSM 14222;
RC	PPN: 0307639101; DOI=10.1073/pnas.0307639101;
RX	PubMed=15064399; Tettelin H., Eisen J.A., Heidelberg J.F., Dodson R.J., Myers G.S.A., Brinkac L.M., Madupu R., Fouts D.E., Holt D.H., Nelson K.E., Seshadri R., Davidsen T.M., DeBoy R.T., Relman D.A., Relman D., Ren O., Brinkac L.M., Madupu R., Kolonay J.F., Durkin S.A., Daugherty S.C., Shetty J., Shvartsbeyn A., Gebrgeorgis B., Gear K., Tsegeye G., Malek J.A., Ayodjeji B., Shataman S., McLeod M.P., Smalls D., Howell J.K., Pal S., Amin A., Vashisth P., McNeil T.Z., Xiang Q., Sodergren E., Baca E., Weinstock G.M., Norris S.J., Fraser C.M., Paulsen I.T., "Comparison of the genome of the oral pathogen <i>Treponema dentitcola</i> with other spirochete genomes", Proc. Natl. Acad. Sci. U.S.A. 101:5646-5651 (2004).
RT	RT
RL	Proc. Natl. Acad. Sci. U.S.A. 101:5646-5651 (2004).
DR	EMBL: AE017252; AAC12417.1; -; Genomic_DNA.
TIGR:	TDE1903; -
KW	Complete Proteome.
SQ	SEQUENCE 212 AA; 24653 MW; 213875EDBF7283F CRC64;
Query Match	69.4%; Score 34; DB 2; Length 212;
Best Local Similarity	60.0%; Pred. No. 1.8e+02;
Matches	6; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
Qy	1 HSFGVAVSE 10
Db	48 HLFSGITKE 57
RESULT 38	QSNRG0 ZYMMO
ID	ZYMMO PRELIMINARY;
AC	PRT; 223 AA.
DSNRG0;	DSNRG0;
DT	(TREMBLrel. 29, Created)
DT	01-FEB-2005 (TREMBLrel. 29, Last sequence update)
DT	01-FEB-2005 (TREMBLrel. 29, Last annotation update)
DB	Glutaredoxin 2.
GN	Name=GrxB; OrderedLocusNames=ZM00070;
OS	Zymomonas mobilis.
OC	Sphingomonadaceae; Alpha proteobacteria; Sphingomonadales;
OC	OC
OX	Zymomonas mobilis.
RN	NCBI_TAXID=542;
RP	NUCLEOTIDE SEQUENCE [LARGE SCALE GENOMIC DNA].
RC	STRAIN=ATCC 31121 / ZM4 / CP4;
RX	PubMed=1592456; DOI=10.1038/nbt1045;
RA	Seo J.-S., Chong H., Park H.-S., Yoon K.-O., Jung C., Kim J.-J., Hong J.-H., Kim H., Kim J.-H., Kil J.-I., Park C.-J., Oh H.-M., Lee J.-S., Jin S.-J., Um H.-W., Lee H.-J., Oh S.-J., Kim J.-Y., Kang H.-L., Lee S.-Y., Lee K.-J., Kang H.-S., RT "The genome sequence of the ethanologenic bacterium <i>Zymomonas mobilis</i> ZM4"; Nat. Biotechnol. 23:63-68 (2005).
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; F:electron transporter activity; IEA.
DR	GO: 0005454; P:cellular thioredoxin activity; IEA.
DR	GO: 0006118; P:electron transport; IEA.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR01901; GRXB.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
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DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
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DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR02182; GRXB; 1-
DR	InterPro: IPR011767; GLR_AS.
DR	InterPro: IPR007494; Glutaredoxin2_C.
DR	InterPro: IPR004045; GST_Nterm.
DR	InterPro: IPR012336; thioredoxin-like.
DR	Pfam: PF004549; Glutaredoxin2_C; 1.
DR	TIGRFAMS: TIGR0218

Qy	1 HSPSGVAVS 9 : : 100 HSPGIVS 108	RT the early vertebrate proto-karyotype."; RL Nature 431:946-957 (2004). RN [2]	
Db	Q56W18_ARATH PRELIMINARY; ID Q56W18_ARATH PRELIMINARY; AC 39 DT 10-MAY-2005 (TREMBLrel. 30; Created) DT 10-MAY-2005 (TREMBLrel. 30; Last sequence update) DT 10-MAY-2005 (TREMBLrel. 30; Last annotation update) DE Galactosidase (Fragment). GN Name-At3913750; OS Arabidopsis thaliana (Mouse-ear cress). OC Eukaryota; Viridiplantae; Stramenoplyta; Embryophyta; Tracheophyta; OC Spermatophyta; Magnoliophyta; eudicots; rosids; OC eudicots II; Brassicales; Brassicaceae; Arabidopsis. OX NCBI_TaxID=3702; RN	RP NUCLEOTIDE SEQUENCE; RA Torki Y., Seki M., Ishida J., Nakajima M., Enju A., Kamiya A., RA Narusaka M., Shin-i T., Nakagawa M., Sakamoto N., Oishi K., Kohara Y., RA Kobayashi M., Toyoda A., Sakaki Y., Sakurai T., Iida K., Akiyama K., RA Satou M., Toyoda T., Konagaya A., Carninci P., Kawai J., RA Hayashizaki Y., Shinozaki K.; RT "Large-scale analysis of RIKEN Arabidopsis full-length (RAFL) cDNAs." RL Submitted (MAR-2005) to the EMBL/GenBank/DBJ databases. DR EMBL; AR22229; BAD95407.1; -; mRNA. FT NON_TER 1 SQ SEQUENCE 270 AA; 29597 MW; 6BCF4538A169957A CRC64;	
Qy	1 HSPSGVAVS 9 : : 27 HSLSSSSVE 36	RESULT 39 ID Q56W18_ARATH PRELIMINARY; AC 30 DT 10-MAY-2005 (TREMBLrel. 30; Created) DT 10-MAY-2005 (TREMBLrel. 30; Last sequence update) DE Galactosidase (Fragment). GN Name-At3913750; OS Arabidopsis thaliana (Mouse-ear cress). OC Eukaryota; Viridiplantae; Stramenoplyta; Embryophyta; Tracheophyta; OC Spermatophyta; Magnoliophyta; eudicots; rosids; OC eudicots II; Brassicales; Brassicaceae; Arabidopsis. OX NCBI_TaxID=3702; RN	
Db	Q56W18_ARATH PRELIMINARY; ID Q56W18_ARATH PRELIMINARY; AC 30 DT 10-MAY-2005 (TREMBLrel. 30; Created) DT 10-MAY-2005 (TREMBLrel. 30; Last sequence update) DE Galactosidase (Fragment). GN Name-At3913750; OS Arabidopsis thaliana (Mouse-ear cress). OC Eukaryota; Viridiplantae; Stramenoplyta; Embryophyta; Tracheophyta; OC Spermatophyta; Magnoliophyta; eudicots; rosids; OC eudicots II; Brassicales; Brassicaceae; Arabidopsis. OX NCBI_TaxID=3702; RN	RP NUCLEOTIDE SEQUENCE; RA Torki Y., Seki M., Ishida J., Nakajima M., Enju A., Kamiya A., RA Narusaka M., Shin-i T., Nakagawa M., Sakamoto N., Oishi K., Kohara Y., RA Kobayashi M., Toyoda A., Sakaki Y., Sakurai T., Iida K., Akiyama K., RA Satou M., Toyoda T., Konagaya A., Carninci P., Kawai J., RA Hayashizaki Y., Shinozaki K.; RT "Large-scale analysis of RIKEN Arabidopsis full-length (RAFL) cDNAs." RL Submitted (MAR-2005) to the EMBL/GenBank/DBJ databases. DR EMBL; AR22229; BAD95407.1; -; mRNA. FT NON_TER 1 SQ SEQUENCE 270 AA; 29597 MW; 6BCF4538A169957A CRC64;	
Qy	1 HSPSGVAVS 9 : : 27 HSLSSSSVE 36	RESULT 40 ID Q4T7J5_TETNG PRELIMINARY; AC 31 DT 13-SEP-2005 (TREMBLrel. 31; Created) DT 13-SEP-2005 (TREMBLrel. 31; Last sequence update) DE Chromosome undetermined SCARF8089, whole genome shotgun sequence. DE (Fragment). GN Tetraodon nigroviridis (Green puffer). OS Bokaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; OC Acanthomorpha; Neopterygii; Teleostei; Euteleostei; Neoteleostei; OC Acanthopterygii; Acanthopterygii; Percomorpha; Tetraodontiformes; OC Tetraodontida; Tetraodontidae; Tetraodon. OX NCBI_TaxID=99883; RN	RP NUCLEOTIDE SEQUENCE; RA Jailloux O., Aury J.M., Brunet F., Petit J.L., Strange-Thomann N., RA Mauceli E., Bouneau L., Fischer C., Osofou-Costaz C., Bernot A., RN Nicaud S., Jaffe D., Fisher S., Lutfalla G., Dossat C., Segurens B., RA Dasilva C., Salanoubat M., Levy M., Boudet N., Castellano S., RA Anthouard V., Jubin C., Castelli V., Katinka B., Vacherie B., RA Bllement C., Skalli Z., Cattolico L., Poulaire J., De Berardinis V., RA Cruaud C., Duprat S., Brottier P., Courteau J.P., Gouzy J., RA Parra G., Lardier G., Chapelle C., McKernan K.J., McEvlan P., Bosak S., RA Kelis M., Vollff J.N., Guigo R., Zody M.C., Mesirow J., RA Lindblad-Toh K., Birren B., Nusbaum C., Kahn D., Robinson-Rechavi M., RA Laudet V., Schachter V., Weissenbach J., Saurin W., Scarpelli C., RA Wincker P., Lander E.S., Quétier F., Roest Crollius H., RN "Genome duplication in the teleost fish Tetraodon nigroviridis reveals
Db	Q4T7J5_TETNG PRELIMINARY; ID Q4T7J5_TETNG PRELIMINARY; AC 31 DT 13-SEP-2005 (TREMBLrel. 31; Created) DT 13-SEP-2005 (TREMBLrel. 31; Last sequence update) DE Chromosome undetermined SCARF8089, whole genome shotgun sequence. DE (Fragment). GN Tetraodon nigroviridis (Green puffer). OS Bokaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; OC Acanthomorpha; Neopterygii; Teleostei; Euteleostei; Neoteleostei; OC Acanthopterygii; Acanthopterygii; Percomorpha; Tetraodontiformes; OC Tetraodontida; Tetraodontidae; Tetraodon. OX NCBI_TaxID=99883; RN	RESULT 41 ID Q27496_CAEEL PRELIMINARY; AC 01-NOV-1996 (TREMBLrel. 01; Created) DT 01-NOV-1996 (TREMBLrel. 01; Last sequence update) DR EMBL; CAAE01005089; CAF91137.1; -; Genomic_DNA. FT NON_TER 1 SQ SEQUENCE 286 AA; 32391 MW; 79A2DCFC272A7F47 CRC64;	
Qy	1 HSPSGVAVS 8 : : 189 HSPAGVAN 196	Query Match Score 34; DB 2; Length 286; Best Local Similarity 75.0%; Pred. No. 2.4e+02; Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0; Db 189 HSPAGVAN 196	
Db	Q27496_CAEEL PRELIMINARY; ID Q27496_CAEEL PRELIMINARY; AC 027496; DT 01-NOV-1996 (TREMBLrel. 01; Created) DT 01-NOV-1996 (TREMBLrel. 01; Last sequence update) DR EMBL; CAAE01005089; CAF91137.1; -; Genomic_DNA. FT NON_TER 1 SQ SEQUENCE 286 AA; 32391 MW; 79A2DCFC272A7F47 CRC64;	Query Match Score 34; DB 2; Length 286; Best Local Similarity 75.0%; Pred. No. 2.4e+02; Matches 6; Conservative 2; Mismatches 0; Indels 0; Gaps 0; Db 189 HSPAGVAN 196	
Qy	1 HSPSGVAVS 9 : : 128 HSFGGVFSV 136	RESULT 42 ID Q27496_CAEEL PRELIMINARY; AC 01-NOV-1996 (TREMBLrel. 01; Created) DT 01-NOV-1996 (TREMBLrel. 01; Last sequence update) DR EMBL; CAAE01005089; CAF91137.1; -; Genomic_DNA. FT NON_TER 1 SQ SEQUENCE 286 AA; 32391 MW; 79A2DCFC272A7F47 CRC64;	

Gibson R.,	Merberg D.,	Mills S.D.,	Jiang Q.,	Taylor D.E.,	Vovis G.F.,
RA	RA	RA	RA	RA	RA
Trust T.J.	Genomic sequence comparison of two unrelated isolates of the human				
RT	gastro pathogen Helicobacter pylori."				
RT	Nature 397:156-180(1999).				
RL	"- SIMILARITY: Belongs to the glyceraldehyde-3-phosphate				
CC	dehydrogenase family.				
DR	EMBL: AE001519; AAD068388.1; - ; Genomic_DNA.				
DR	PIR: C71880; C718A.				
DR	HSSP: P003622; 4DBV.				
DR	GO: GO-0000577; C:cytoplasm; IEA.				
DR	GO: GO-0004776; F:glyceraldehyde-3-phosphate dehydrogenase (p. . . ; IEA.				
DR	GO: GO-0051287; F:NAD binding; IEA.				
DR	GO: GO-0016491; F:oxidoreductase activity; IEA.				
DR	GO: GO-0006006; GO:GO-0006006; P:glucose metabolism; IEA.				
DR	GO: GO-0006096; P:glycolysis; IEA.				
DR	InterPro: IPR000624; GAPDH-I.				
DR	InterPro: IPR011596; GAPDH like				
DR	InterPro: IPR000173; GAP dh/dhase.				
DR	PANTHER: PTMR10836; GAP dh/dhase; 1.				
DR	PFam: PF02800; Gp_dh_C_1.				
DR	PFam: PF000044; GP_dh_N_1.				
DR	PRINTS: PRO0078; G3PDHGRNASE.				
DR	PRODOM: PD007761; GAPDH-like; 1.				
DR	TIGRFAMS: TIGR01534; GAPDH-I; 1.				
KW	Complete proteome; Oxidoreductase.				
SEQUENCE	SEQUENCE 330 AA; 3603 MW; 2581D417C4112043 CRC64;				
Query Match	69.4%; Score 34; DB 2; Length 330;				
Best Local Similarity	50.0%; Pred. No. 2.8e+02;				
Matches	5; Conservative 3; Mismatches 2; Indels 0; Gaps				
Qy	1 HSFGVAVSE 10				
Db	264 HAFKGTVSD 273				
RESULT 46					
Q606P2_METCA					
ID Q606P2_METCA PRELIMINARY;					
ID Q606P2_J METCA PRELIMINARY;					
AC Q606P2_J METCA PRELIMINARY;					
DT 25-OCT-2004 (TREMBLrel. 28, Created)					
DT 25-OCT-2004 (TREMBLrel. 28, Last sequence update)					
DT 25-OCT-2004 (TREMBLrel. 28, Last annotation update)					
DE Initiation factor 2 subunit family protein.					
GN OrderedLocusName=MCA1974;					
OS Methylococcus capsulatus					
BACTERIA; Proteobacteria; Gammaproteobacteria; Methylococcales;					
OC Methylotococceae; Methylococcus					
OC NCBI_TaxID=414; RN [1]					
RN NUCLEOTIDE SEQUENCE.					
RC STRAIN=Bath / NCIMB 11132;					
PY PMID=15383849; DOI=10.1137/journal.pbio.0020303;					
PY Ward N.L., Larsen O., Saito J., Bruseth L., Khouri H.M., Durkin A.S.,					
RA Dimitrov G., Jiang L., Scanlan D., Kang K.H., Lewis M.R., Nelson K.E.,					
RA Methie B.A., Wu M., Heidelberg J.F., Paulsen I.T., Fouls D.E.,					
RA Ravel J., Tettelin H., Ren Q., Read T.D., Detroy R.T., Seshadri R.,					
RA Salzberg S.L., Jensen H.B., Birkeland N.K., Nelson W.C., Dodson R.J.,					
RA Grindhaug S.H., Holt I.E., Erdmann J.I., Johnsen I., Vanaken S.,					
RA Utterback T.R., Pelebony T.V., Fraser C.M., Lillehaug J.R.,					
RA Eisen J.A.;					
RA "Genomic insights into methanotrophy: the complete genome sequence of					
RT Methylococcus capsulatus (Bath)."					
RL PLoS Biol. 2:616-628 (2004).					
DR EMBL: AB17282; AAU92003.1; - ; Genomic DNA.					
DR TIGR: MCA1974; - ;					
DR GO: GO:0003743; F:translational initiation factor activity; IEA.					
DR GO: GO:0042419; P:cellular biosynthesis; IEA.					
DR InterPro: IPR000649; IF-2B.					
DR InterPro: IPR01007559; IF-2B rel; 1.					
DR TIGRFAMS: TIGR00524; eIF-2B rel; 1.					
DR PFT01007559; IF-2B rel; 1.					

KW	Complete proteome; Initiation factor.						
SQ	SEQUENCE 352 AA; 37081 MW; FCB945B6B6F9BF9 CRC64;						
	Query Match 69.4%; Score 34; DB 2; Length 352;						
	Best Local Similarity 60.0%; Pred. No. 3e+02;						
	Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps 0;						
Qy	1 HSFSGVASV 1.0						
Db	4 HSFSAVSAVQ 13						
RESULT 47							
Q5RS2_CRYNE	CRYNE PRELIMINARY;	PRT;	374 AA.				
ID	Q5RS2_CRYNE PRELIMINARY;						
AC	"Crytococcus neoformans serotype D sequencing";						
DT	13-FEB-2005 (TREMBLrel. 31, Created)						
DT	13-SEP-2005 (TREMBLrel. 31, Last sequence update)						
DT	13-SEP-2005 (TREMBLrel. 31, Last annotation update)						
DT	Hypothetical protein.						
GN	ORFNames=CNBEB4530;						
OS	Cryptococcus neoformans var. neoformans B-3501A.						
OC	Tremellomycetidae; Fungi; Basidiomycota; Hymenomycetes; Heterobasidiomycetes;						
OC	Tremellales; Tremellaceae; Filobasidiella.						
OX	NCBI_TaxID=283643;						
RN	[1]						
RP	NUCLEOTIDE SEQUENCE.						
RC	STRAIN=B-3501A;						
RA	Rowley D., Bruno D., Miranda M., Fukushima M., Hyman R.W., Rowley D., Miranda M., Hyman R.W., Wicker B.L., Fu J., Davis R.W.;						
RA	Wicker B.L., Fu J., Davis R.W.;						
RA	"Cryptococcus neoformans serotype D sequencing";						
RA	Submitted (JUL-2004) to the EMBL/GenBank/DBJ databases.						
CC	- CAUTION: The sequence shown here is derived from an EMBL/GenBank/DBJ whole genome shotgun (WGS) entry which is preliminary data.						
CC	EMBL: AAEGY01000028; EAL20539.1; -; Genomic_DNA.						
DR	Hypothetical protein.						
KW	SEQUENCE 374 AA; 40344 MW; B07E2DE2AC577B1P CRC64;						
Qy	1 HSFSGVASV 9						
Db	135 HSFAGVYSL 143						
RESULT 48							
Q5KZ15_GEOKA	GEOKA PRELIMINARY;	PRT;	383 AA.				
ID	Q5KZ15_GEOKA PRELIMINARY;						
AC	"Geobacillus kaustophilus".						
DT	01-FEB-2005 (TREMBLrel. 29, Created)						
DT	01-FEB-2005 (TREMBLrel. 29, Last sequence update)						
DT	01-FEB-2005 (TREMBLrel. 29, Last annotation update)						
DB	Bacteria; Firmicutes; Bacillales; Geobacillus.						
GN	Geobacillus kaustophilus.						
OS	NCBI_TaxID=1462;						
RN	[1]						
RP	NUCLEOTIDE SEQUENCE.						
RC	STRAIN=HTAA26;						
RX	PubMed:15576355; DOI=10.1093/nar/gk970;						
RA	Takaki Y., Chee G.-J., Nishi S., Shimamura S., Suzuki H., Matsui S., Uchiyama I.;						
RA	"Thermoadaptation trait revealed by the genome sequence of thermophilic Geobacillus kaustophilus".						
RT	Nucleic Acids Res. 32:6292-6303 (2004); EMBL: BA000043; BAD75301.1; -; Genomic_DNA.						
DR	Complete proteome.						
KW	SEQUENCE 383 AA; 43647 MW; BA7F48D2B7F21FB1 CRC64;						
Qy	1 HSFGVASV 10						
Db	315 HAASGVADVE 324						
RESULT 49							
Q7WBNS_BORPA	BORPA PRELIMINARY;	PRT;	402 AA.				
ID	Q7WBNS_BORPA PRELIMINARY;						
AC	"Treponema pallens".						
DT	01-OCT-2003 (TREMBLrel. 25, Created)						
DT	01-OCT-2003 (TREMBLrel. 25, Last sequence update)						
DT	01-MAR-2004 (TREMBLrel. 26, Last annotation update)						
DE	Putative branched-chain amino acid transporter substrate-binding protein.						
GN	OrderedLocusNames=BP2097;						
OS	Bordetella bronchiseptica (Alcaligenes bronchisepticus).						
RESULT 50							
Q7WM99_BORER	BORER PRELIMINARY;	PRT;	402 AA.				
ID	Q7WM99_BORER PRELIMINARY;						
AC	"Treponema pallens".						
DT	01-OCT-2003 (TREMBLrel. 25, Created)						
DT	01-OCT-2003 (TREMBLrel. 25, Last sequence update)						
DT	01-MAR-2004 (TREMBLrel. 26, Last annotation update)						
DE	Putative branched-chain amino acid transporter substrate-binding protein.						
GN	OrderedLocusNames=BB1493;						
OS	Bordetella bronchiseptica (Alcaligenes bronchisepticus).						

OC Bacteria; Proteobacteria; Betaproteobacteria; Burkholderiales;
 OC Alcaligenaceae; Bordetellales;
 OC NCBI_Taxid=518;

```
RN [1]
RN NUCLEOTIDE SEQUENCE
RP STRAIN=RBS0 / ATCC BAA-588;
RX MEDLINE=23827934; Pubmed=12910271; DOI=10.1038/ng1227;
RA Parrhill J., Sebainia M., Preston A., Murphy L.D., Thomson N.R., Bentley S.D., Mangal K.L.,
RA Harris D.B., Holden M.T.G., Churcher C.M., Quail M.A.,
RA Cerdano-Parraga A.-M., Temple L., James K.D., Harris B., Quail M.A.,
RA Achman M., Arkin R., Baker S., Basham D., Bason N., Cherevach I.,
RA Chillingworth T., Collins M., Cronin A., Davis P., Doggett J.,
RA Fellwell T., Goble A., Hamlin N., Hauser H., Holroyd S., Jagels K.,
RA Leather S., Moule S., Norberczak H., O'Neil S., Ormond D., Price C.,
RA Rabinowitzsch E., Rutter S., Sanders M., Saunders D., Seeger K.,
RA Sharp S., Simmonds M., Shelton J., Squares R., Squares S., Stevens K.,
RA Unwin L., Whitehead S., Barrell B.G., Maskell D.;  

RT "Comparative analysis of the genome sequences of Bordetella pertussis,  

RT Bordetella parapertussis and Bordetella bronchiseptica.";  

RL Genet. 35:32-40(2003);  

DR EMBL; BX440441; CAAE1990.1; -; Genomic DNA.  

DR GO; GO:0016022; C: integral to membrane; IEA.  

DR GO; GO:0030288; C: Peripasmic space (sensu Gram-negative Bact. . . ; IEA.  

DR GO; GO:0005279; F: amino acid-polyamine transporter activity; IEA.  

DR GO; GO:0004872; F: receptor activity; IEA.  

DR InterPro; IPR001828; ANF receptor.  

DR InterPro; IPR000709; Leu_ile_Val_bind.  

DR Pfam; PF01094; ANF receptor; 1.  

DR PRINTS; PR00337; LEUILEVALBP.  

KW Complete proteome.  

SQ SEQUENCE 402 AA; 43150 MW; AAC86E9DD190CA5D CRC64;
```

Query Match 69.4%; Score 34; DB 2; Length 402;
 Best Local Similarity 70.0%; Pred. No. 3.4e-02;
 Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy	1	HSFGVAVSE 10
	:	
Db	315	HAASGGVADVE 324

Search completed: April 5, 2006, 17:43:09
 Job time : 236 secs

GenCore version 5.1.7
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OM protein - protein search, using sw model

Run on: April 5, 2006, 17:39:33 ; Search time 38 Seconds
 (without alignments)
 25.320 Million cell updates/sec

Title: US-10-772-537-4

Perfect score: 49 Gapop 10.0 , Gapext 0.5

Sequence: 1 HSFGVAVVE 10

Scoring table: BL2SUM62

Searched: 284416 seqs, 96216763 residues

Total number of hits satisfying chosen parameters:

283416

Minimum DB seq length: 0
 Maximum DB seq length: 2000000000Post-processing: Minimum Match 0\$
 Maximum Match 100\$

Listing first 100 summaries

Database : PIR_80;*
 1: pir;*:*
 2: pir2;*:*
 3: pir3;*:*
 4: pir4;*:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution..

SUMMARIES

Result No.	Score	Query Match Length	DB ID	Description
1	49	100.0	362	S22395
2	46	93.9	359	A35714
3	46	93.9	364	S22394
4	38	77.6	345	S21054
5	38	77.6	348	JCS331
6	38	77.6	375	A32827
7	36	73.5	215	G83184
8	36	73.5	2342	T18200
9	35	71.4	3227	T37564
10	34	69.4	197	F72528
11	34	69.4	211	S21864
12	34	69.4	291	T21322
13	34	69.4	330	B64588
14	34	69.4	330	C71830
15	34	69.4	462	T19652
16	34	69.4	724	T04340
17	34	69.4	1558	AB2457
18	33	67.3	94	S03380
19	33	67.3	128	T15911
20	33	67.3	149	A12669
21	33	67.3	149	G97451
22	33	67.3	150	S17702
23	33	67.3	258	D83190
24	33	67.3	460	G9890
25	33	67.3	460	B85727
26	33	67.3	460	B64902
27	33	67.3	535	S19729
28	33	67.3	890	C96654
29	33	67.3	901	G71286

30	67.3	1209	2	T52523
31	65.3	239	1	B64406
32	65.3	257	2	G86710
33	65.3	329	2	T45849
34	65.3	394	2	T31121
35	65.3	417	2	T23013
36	65.3	437	2	D82614
37	65.3	455	2	D82670
38	65.3	458	2	F82444
39	65.3	462	2	A81885
40	65.3	461	2	A0280
41	65.3	462	1	DECXB
42	65.3	462	2	A10682
43	65.3	462	2	F82444
44	65.3	462	2	NAD(P)
45	65.3	464	2	transhydro
46	65.3	465	2	NAD(P)
47	65.3	465	2	transhydro
48	65.3	474	2	NAD(P)
49	65.3	480	2	transhydro
50	65.3	481	2	NAD(P)
51	65.3	481	2	transhydro
52	65.3	502	2	AD3563
53	65.3	526	2	C84552
54	65.3	610	2	JC7315
55	65.3	610	2	T06520
56	65.3	635	2	T18250
57	65.3	635	2	A97659
58	65.3	635	2	AC2883
59	65.3	635	2	T18222
60	65.3	635	2	A29944
61	65.3	635	2	T30877
62	65.3	635	2	T30548
63	65.3	635	2	T18250
64	65.3	635	2	T18238
65	65.3	635	2	G8483
66	65.3	635	2	A10638
67	65.3	635	2	F81650
68	65.3	635	2	G73387
69	65.3	635	2	T34575
70	65.3	635	2	A0118
71	65.3	635	2	T31826
72	65.3	635	2	H82955
73	65.3	635	2	T0460
74	65.3	635	2	D71656
75	65.3	635	2	A61500
76	65.3	635	2	T2444
77	65.3	635	2	T03845
78	65.3	635	2	T45087
79	65.3	635	2	T32756
80	65.3	635	2	T2670
81	65.3	635	2	A16865
82	65.3	635	2	C61023
83	65.3	635	2	AE1305
84	65.3	635	2	A46231
85	65.3	635	2	C81273
86	65.3	635	2	T04453
87	65.3	635	2	B45738
88	65.3	635	2	AD0751
89	65.3	635	2	B71311
90	65.3	635	2	H84686
91	65.3	635	2	520
92	65.3	635	2	T17196
93	65.3	635	2	T02197
94	65.3	635	2	G96011
95	65.3	635	2	C82529
96	65.3	635	2	S73098
97	65.3	635	2	T39624
98	65.3	635	2	JC4037
99	65.3	635	2	BWYBDL
100	65.3	635	2	T32338

hypothetical prote
 probable 3-isoprop
 conserved hypothet
 peroxidase ATP2a
 hypothetical prote
 glycaramide ribon
 hypothetical prote
 NAD(P) transhydro
 probable NAD(P) tr
 NAD(P) transhydro
 transhydrogenase C
 hypothetical prote
 myoneurin - human
 probable beta-gala
 transhydrogenase h
 pyridine nucleotid
 diacylglycerol kin
 nicotinamide nucle
 choptin precursor
 adenylylate cyclase
 hypothetical prote
 UDP-N-acetylglucos
 conserved hypothet
 allergen Der p 1 -
 hypothetical prote
 hypothetical prote
 probable sigma-70
 conserved hypothet
 SUMMARIES

ALIGNMENTS

J. Cell. Physiol. 149, 222-234, 1991
 A;Title: Fetusin and alpha-2HS glycoprotein induce alkaline phosphatase in epiphyseal
 A;Reference number: A61376; MUID:92084776; PMID:1721070

RESULT 1

S22395
 fetuin precursor - Pig (fragment)
 C;Species: Sus scrofa domestica (domestic pig)
 C;Date: 07-Apr-1994 #text_change 09-Jul-2004
 C;Accession: S22395; S22442
 R;Brown, W.M.; Dziegielewska, K.M.; Saunders, N.R.; Christie, D.L.; Nawratil, P.; Muelle
 Eur. J. Biochem. 205, 321-331, 1992
 A;Title: The nucleotide and deduced amino acid structures of sheep and pig fetuin. Comm
 A;Reference number: S22394; MUID:92209519; PMID:1372866
 A;Molecule type: mANA
 A;Residues: 1-362

 A;Cross-references: UNIPROT:P29700; UNIPARC:UPI000012501A; EMBL:X56021; PIDN:
 C;SuperFamily: alpha-2-HS-glycoprotein; cystatin homology
 C;Keywords: calcium binding; EF hand; glycoprotein
 F;1-15/Domain: signal sequence (fragment) #status predicted <SIG>
 F;16-362/Product: fetuin #status predicted <MAT>
 F;20-134/Domain: cystatin homology <CY1>
 F;443-249/Domain: cystatin homology <CY2>
 P;96,153,173/Binding site: carbohydrate (Asn) (covalent) #status predicted
 Query Match Score 49; DB 2; Length 362;
 Best Local Similarity 100.0%; Pred. No. 0.024;
 Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 HSFSGVAVVE 10
 ||||| |||||
 Db 311 HSFSGVAVVE 320

RESULT 2

A35714
 fetuin precursor - bovine
 N;Alternative names: alpha-2-HS-glycoprotein taurinus; chondrocyte alkaline phosphatase inc
 C;Species: Bos primigenius taurus (Cattle)
 C;Accession: A35714; #sequence revision 28-Sep-1990 #text_change 09-Jul-2004
 R;Dziegielewska, K.M.; Brown, W.M.; Casey, S.J.; Christie, D.L.; Foreman, R.C.; Hill, R.
 J. Biol. Chem. 265, 4354-4357, 1990
 A;Title: The complete cDNA and amino acid sequence of bovine fetuin. Its homology with a
 A;Reference number: A35714; MUID:90170937; PMID:1689725
 A;Molecule type: mRNA
 A;Residues: 1-359 <DZI>
 A;Cross-references: UNIPROT:PI2763; UNIPARC:UPI0000125015; GB:X165777; PIDN:CAR
 R;Christie, D.L.; Dziegielewska, K.M.; Hill, R.M.; Saunders, N.R.
 PBBs Lett. 214, 45-49, 1987
 A;Title: Fetusin: the bovine homologue of human alpha-2-HS glycoprotein.
 A;Reference number: A26591; MUID:87190952; PMID:2436343
 A;Accession: A26591
 A;Molecule type: protein
 A;Residues: 19-71, 'Q' 73-98, 'X' 100-105, 'H' 107-115, 'FS' 118, 'V', 120, 'L', 122-123, 188-194
 A;Cross-references: UNIPARC:UPI0000177A81; UNIPARC:UPI0000177A82
 R;Chen, C.Q.; Wold, F.P.
 J. Biol. Chem. 263, 111-117, 1988
 A;Title: The covalent structure of individual N-linked glycopeptides from ovomucoid and
 A;Reference number: A29914; MUID:88087074; PMID:2447075
 A;Accession: A29914
 A;Molecule type: protein
 A;Residues: 72-103; 144-185, 'P', 187 <YEN>
 A;Cross-references: UNIPARC:UPI0000177A83; UNIPARC:UPI0000177A84
 R;Alcaraz, G.; Marti, J.; Moirier, D.; Pougeau, M.
 Biochem. Biophys. Res. Commun. 99, 30-36, 1981
 A;Reference number: A05142; MUID:81207262; PMID:6165360
 A;Accession: A05142
 A;Molecule type: protein
 A;Residues: 19-56, 'VK' 59-62 <ALC>
 A;Cross-references: UNIPARC:UPI0000177A85
 R;Ishikawa, Y.; Wu, L.N.Y.; Valhmu, W.B.; Wuthier, R.E.

RESULT 4
 S21094

J. Cell. Physiol. 149, 222-234, 1991
 A;Title: Fetusin and alpha-2HS glycoprotein induce alkaline phosphatase in epiphyseal
 A;Reference number: A61376; MUID:92084776; PMID:1721070
 A;Accession: A61376
 A;Molecule type: protein
 A;Residues: 19-56, 'VK' 59-62 <ISH>
 A;Cross-references: UNIPARC:UPI0000177A85
 R;Strawich, E.; Glimcher, M.J.
 Eur. J. Biochem. 191, 47-56, 1990
 A;Title: Tooth 'enamelins' identified mainly as serum proteins. Major 'enamelin' is a
 A;Reference number: S10780; MUID:90336641; PMID:2379503
 A;Accession: S10781
 A;Molecule type: protein
 A;Residues: 19-31 <STR>
 A;Cross-references: UNIPARC:UPI00000FDFB2D
 R;Kitajima, K.; Suzuki, T.; Kouchi, Z.; Inoue, S.; Inoue, Y.
 Arch. Biochem. Biophys. 319, 393-401, 1995
 A;Title: Identification and distribution of peptide-N-glycanase (PNGase) in mouse org
 A;Reference number: S65895; MUID:95305576; PMID:7786020
 A;Accession: S65895
 A;Molecule type: protein
 A;Residues: 155-159 <KIT>
 A;Cross-references: UNIPARC:UPI0000177A86
 C;Superfamily: alpha-2-HS-glycoprotein; cystatin homology
 C;Keywords: glycoprotein; plasma
 F;1-18/Domain: signal sequence #status predicted <SIG>
 F;19-359/Product: fetuin #status experimental <MAT>
 F;23-137/Domain: cystatin homology <CY1>
 F;146-253/Domain: cystatin homology <CY2>
 F;99,156,176/Binding site: carbohydrate (Asn) (covalent) #status experimental
 Query Match Score 93.9%; Best Local Similarity 90.0%; Score 46; DB 2; Length 359;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 HSFSGVAVVE 10
 :|||||||
 Db 313 HSFSGVAVVE 322

RESULT 3
 S22394
 fetuin precursor - sheep
 C;Species: Ovis orientalis aries (domestic sheep)
 C;Date: 07-Apr-1994 #sequence_revision 07-Apr-1994 #text_change 09-Jul-2004
 S22394
 R;Brown, W.M.; Dziegielewska, K.M.; Saunders, N.R.; Christie, D.L.; Nawratil, P.; Mu
 Bur. J. Biochem. 205, 321-331, 1992
 A;Title: The nucleotide and deduced amino acid structures of sheep and pig fetuin. Co
 A;Reference number: S22394; MUID:92209519; PMID:1372866
 A;Accession: S22394
 A;Molecule type: mRNA
 A;Residues: 1-364 <FOR>
 A;Cross-references: UNIPROT:P29701; UNIPARC:UPI000012501D; EMBL:X16578; PID:91379; PI
 C;Superfamily: alpha-2-HS-glycoprotein; cystatin homology
 C;Keywords: calcitonin binding; EF hand; glycoprotein
 F;1-18/Domain: signal sequence #status predicted <SIG>
 F;19-354/Product: fetuin #status predicted <MAT>
 F;23-137/Domain: cystatin homology <CY1>
 F;146-253/Domain: cystatin homology <CY2>
 F;99,156,176/Binding site: carbohydrate (Asn) (covalent) #status predicted
 Query Match Score 93.9%; Best Local Similarity 90.0%; Score 46; DB 2; Length 364;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 HSFSGVAVVE 10
 :|||||||
 Db 318 HSFSGVAVVE 327

alpha-2-HS-glycoprotein homolog - mouse
 N;Alternate names: fetuin homolog; fetuin type trypsin inhibitor countertrypin
 C;Species: Mus musculus (house mouse)
 C;Date: 22-Nov-1993 #sequence revision 01-Sep-1995 #text_change 09-Jul-2004
 C;Accession: S21094; D47408; A47408; C47408
 R;Yang, F.; Chan, Z.L.; Bergstrom, J.M.; Cupples, R.L.; Friedrichs, W.E.
 B;Title: Human alpha(2)-HS-glycoprotein/bovine fetuin homologue in mice: identification
 A;Reference number: S21094; MUID:2223988; PMID:1373325
 A;Status: preliminary
 A;Molecule type: mRNA
 A;Residues: 1-345 <YAN>
 A;Cross-references: UNIPROT:P29699; UNIPARC:UPI00000191F; GB:S96534; PIDN:
 R;Yamamoto, K.; Shinohara, H.
 J. Biol. Chem. 268, 17750-17753, 1993
 A;Title: Isolation and characterization of mouse countertrypin, a new trypsin inhibitor
 A;Reference number: A47408; MUID:93352581; PMID:7688730
 A;Status: preliminary
 A;Molecule type: protein
 A;Residues: 276-395 <YAM>
 A;Cross-references: UNIPARC:UPI0000177A87
 A;Experimental source: Plasma
 A;Accession: A47408
 A;Status: preliminary
 A;Molecule type: protein
 A;Residues: 19-36, 'G', 40-41 <YA2>
 A;Cross-references: UNIPARC:UPI0000177A88
 A;Experimental source: Plasma
 A;Note: sequence extracted from NCBI backbone (NCBIP:136431)
 A;Accession: B47408
 A;Status: preliminary
 A;Molecule type: protein
 A;Residues: 81-98, 'L', 100-101, 'I', 103-105 <YA3>
 A;Cross-references: UNIPARC:UPI0000177A89
 A;Experimental source: Plasma
 A;Note: sequence extracted from NCBI backbone (NCBIP:136433)
 A;Accession: C47408
 A;Status: preliminary
 A;Molecule type: protein
 A;Residues: 129-153 <YA4>
 A;Cross-references: UNIPARC:UPI0000177A8A
 A;Experimental source: Plasma
 A;Note: Sequence extracted from NCBI backbone (NCBIP:136435)
 C;Superfamily: alpha-2-HS-glycoprotein; cystatin homology
 C;Keywords: Glycoprotein
 F;23-137/Domain: cystatin homology <CY1>
 F;146-252/Domain: cystatin homology <CY2>

Query Match 77.6%; Score 38; DB 2; Length 345;
 Best Local Similarity 80.0%; Pred. No. 4.5%;
 Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFGVAVVE 10
 Db 304 HAFSPVAVVE 313

RESULT 6
 A32827
 fetuin precursor - rat
 N;Alternate names: 59k bone sialoprotein; tyrosine kinase inhibitor
 C;Species: Rattus norvegicus (Norway rat)
 C;Date: 12-Oct-1989 #sequence Revision 12-Oct-1989 #text_change 09-Jul-2004
 C;Accession: A32827; S22382; I55489; A40766; A39144
 R;Auburger, P.; Falquerho, L.; Contreras, J.O.; Pages, G.; Le Cam, G.; Rossi, B.; Le Cellier, S.; Muramatsu, T.; Dalkuhara, Y.
 A;Title: Characterization of a natural inhibitor of the insulin receptor tyrosine kinase
 A;Reference number: A32827; MUID:89154538; PMID:2766355
 A;Accession: A32827
 A;Status: preliminary
 A;Molecule type: mRNA
 A;Residues: 1-375 <AUB>
 A;Cross-references: UNIPROT:P24090; UNIPARC:UPI0000177A7B; GB:M29758
 R;Rauth, G.; Poschke, O.; Fink, E.; Eulitz, M.; Tippmer, S.; Kellerer, M.; Haering, Bur.; J. Biochem. 204, 523-529, 1992
 A;Title: The nucleotide and partial amino acid sequences of rat fetuin. Identity with
 A;Reference number: S22382; MUID:92174906; PMID:1371750
 A;Accession: S22382
 A;Status: preliminary
 A;Molecule type: mRNA
 A;Residues: 18-62, 'D', 64-92, 'E', 94-287, 'A', 289-353, 'GPVA', 358, 'LCP', 362, 'RVRYFKI', <RI>
 A;Cross-references: UNIPARC:UPI000012501C; BNBL:X63446; PIDN:9220675; PIDN:BAAA01101-1; I
 R;Ohnishi, T.; Arakaki, N.; Nakamura, O.; Ozawa, M.; Arakaki, N.; Hiroto, S.; Dalkuhara, Y.
 J. Bone Miner. Res. 8, 367-377, 1993
 A;Title: Molecular cloning and sequence analysis of cDNA for a 59 kDa bone sialoprotein
 A;Reference number: I55489; MUID:93206661; PMID:7681247
 A;Accession: I55489
 A;Status: preliminary; translated from GB/EMBL/DDJB
 A;Molecule type: mRNA
 A;Residues: 18-62, 'D', 64-92, 'E', 94-287, 'A', 289-353, 'GPVA', 358, 'LCP', 362, 'RVRYFKI', <RI>
 A;Cross-references: UNIPARC:UPI000012501C; GB:D10361; PIDN:9220675; PIDN:BAAA01101-1; I
 R;Ohnishi, T.; Arakaki, N.; Nakamura, O.; Ozawa, M.; Arakaki, N.; Hiroto, S.; Dalkuhara, Y.
 J. Biochem. 266, 1465-1465, 1991
 A;Title: Purification, characterization, and studies on biosynthesis of a 59-kDa bone sialoprotein and its synthesis by both the rat counterpart of human alpha-2-HS glycoprotein and by both the
 A;Reference number: A40766
 A;Accession: A40766
 A;Molecule type: protein
 A;Residues: 36, 'XE', 39-44, 'YQ', 47-48, 'XNN', 52, 'X', 69-82, 183-192, 'X', 194-198, 249-252,
 A;Cross-references: UNIPARC:UPI0000177A7C; UNIPARC:UPI0000177A7D; UNIPARC:UPI0000177A7E
 C;Superfamily: alpha-2-HS-glycoprotein; cystatin homology
 F;40-154/Domain: cystatin homology <CY1>
 F;163-269/Domain: cystatin homology <CY2>

Query Match 77.5% Score 38; DB 2; Length 375;
 Best Local Similarity 80.0%; Pred. No. 4.9;
 Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 Qy 1 HSFSGVAVSE 10
 Db 323 HAFSPVAVSE 332

RESULT 7
 G8384 adenylyl kinase PA3686 [imported] - *Pseudomonas aeruginosa* (strain PA01)
 C;Species: *Pseudomonas aeruginosa*
 C;Accession: G83184
 C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 09-Jul-2004
 R;Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, P.; Hickey, M.J.; Bradman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Folger, K.R.; Kas, A.; Larbig, K.; Lim, J.; Lory, S.; Olson, M.V.
 Nature 406, 959-964, 2000
 A;Title: Complete genome sequence of *Pseudomonas aeruginosa* PA01, an opportunistic pathogen
 A;Reference number: A82950; MUID:10984043
 A;Status: preliminary
 A;Molecule type: DNA
 A;Residues: 1-215 <STO>
 A;Cross-references: UNIPROT:Q9HXV4; UNIPARC:UPI000012DBDF; GB:AE004788; GB:AE004091; NID:2275
 A;Experimental source: strain PA01
 C;Gene: adk; PA3686
 C;Superfamily: adenylyl kinase

Query Match 73.5% Score 36; DB 2; Length 215;
 Best Local Similarity 70.0%; Pred. No. 7.2;
 Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
 Qy 1 HSFSGVAVSE 10
 Db 195 HSIRAGVGSVE 204

RESULT 8
 T18200 fatty-acid synthase homolog p260 - silkworm
 C;Species: *Bombyx mori* (silkworm)
 C;Accession: T18200
 R;Ueno, K.
 A;Description: P260/270 expressed in embryonic abdominal leg cells of *Bombyx mori* can trigger a response to the EMBL Data Library, August 1996
 A;Reference number: Z18815
 A;Accession: T18200
 A;Molecule type: mRNA
 A;Residues: 1-2342 <UNP>
 A;Cross-references: UNIPROT:001677; UNIPARC:UPI00000827B4; EMBL:U67866; NID:g2058457; PI
 C;Superfamily: rat fatty-acid synthase; 3-oxoacyl-1-acyl-carrier-protein synthase I; homodimeric homology; short chain alcohol dehydrogenase homology; [acyl-carrier-protein] S-C;Keywords: carrier protein

Query Match 73.5% Score 36; DB 2; Length 2342;
 Best Local Similarity 60.0%; Pred. No. 91;
 Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
 Qy 1 HSFSGVAVSE 10
 Db 583 HSFVGAAVQ 592

RESULT 9
 T37964 probable ubiquitin ligase - fission yeast (*Schizosaccharomyces pombe*)
 C;Species: *Schizosaccharomyces pombe*

C;Date: 03-Dec-1999 #sequence_revision 03-Dec-1999 #text_change 09-Jul-2004
 C;Accession: T37964
 R;Devlin, K.; Churcher, C.M.; Wood, V.; Barrell, B.G.; Rajandream, M.A.
 submitted to the EMBL Data Library, September 1997
 A;Reference number: 221757
 A;Accession: T37964
 A;Status: preliminary; translated from GB/EMBL/DBBJ
 A;Residues: 1-3227 <DEV>
 A;Cross-references: UNIPROT:O13834; UNIPARC:UPI0000069F11; EMBL:299531; PMID:CAR16714
 A;Experimental source: strain 972h-; cosmid c19D5
 C;Genetics:
 A;Gene: SPDB:SPAC19D5.04
 A;Map position: 1

RESULT 10
 F72628 hypothetical protein APE1486 - *Aeropyrum pernix* (strain K1)
 C;Species: *Aeropyrum pernix*
 C;Accession: F72628
 R;Kawarabayasi, Y.; Hino, Y.; Horikawa, H.; Yamazaki, S.; Haikawa, Y.; Jinno, K.; Tawa, H.; Takamiya, M.; Masuda, S.; Funahashi, T.; Tanaka, T.; Kudo, Y.; Yamazaki, J.; DNA Res. 6, 83-101, 1999
 A;Title: Complete genome sequence of an aerobic hyperthermophilic Crenarchaeon, *Aero*
 A;Reference number: A72450; MUID:9931039; PMID:10382966
 A;Accession: F72628
 A;Status: preliminary
 A;Molecule type: DNA
 A;Residues: 1-197 <KAW>
 A;Cross-references: UNIPROT:Q9YBN4; UNIPARC:UPI000005DF81; DDBJ:AP000061; NID:9510482
 A;Experimental source: strain K1
 C;Genetics:
 A;Gene: APE1486

RESULT 11
 S21864 hypothetical cysteine proteinase (EC 3.4.22.-) - *Euroglyphus maynei*
 N;Alternate names: allergen Eur m 1
 C;Species: *Euroglyphus maynei*
 C;Accession: S21864
 R;Kent, N.A.; Hill, M.; Keen, J.N.; Holland, P.W.H.; Hart, B.
 submitted to the EMBL Data Library, June 1991
 A;Reference number: S21864
 A;Accession: S21864
 A;Status: preliminary
 A;Molecule type: DNA
 A;Residues: 1-211 <KEN>
 A;Cross-references: UNIPROT:P25780; UNIPARC:UPI000016BEC4; EMBL:X60073
 C;Genetics:
 A;Introns: 100/3; 155/2
 C;Superfamily: Papain
 C;Keywords: cysteine proteinase; hydrolase

Query Match	69.4%;	Score 34;	DB 2;	Length 211;				
Best Local Similarity	77.8%;	Pred. No. 18;						
Matches	7;	Conservative	1;	Mismatches	1;	Indels	0;	Gaps 0;
Qy	2 SFSGVASE 10	:						
Db	37 AFSGVASTE 45							
RESULT 12								
T21322	phosphoprotein phosphatase (EC 3.1.3.16) 1 F25B3 4 [similarity] - Caenorhabditis elegans							
C;Species:	Caenorhabditis elegans							
C;Date:	15-Oct-1999 #sequence_revision 15-Oct-1999 #text_change 05-Oct-2004							
C;Accession:	T21322							
R;Gardner, A.	submitted to the EMBL Data Library, April 1996							
A;Reference number:	Z19406							
A;Accession:	T21322							
A;Status:	translated from GB/EMBL/DDBJ							
A;Molecule type:	DNA							
A;Residues:	1-291 <WIL>							
A;Cross-references:	UNIPROT:Q27496; UNIPARC:UPI000007D589; EMBL:Z70752; PIDN:CAA94756.1;							
A;Experimental source:	clone F25B3							
C;Genetics:								
A;Gene:	CESP-F25B3.4							
A;Map Position:	5							
A;Introns:	20/2; 15/7/3; 273/3							
C;Superfamily:	serine/threonine protein phosphatase; phosphoesterase core homology; phosphatase; iron/metalloprotein; phosphoric monoester hydrolase; serine/threonine-specific							
C;Keywords:	iron; phosphoprotein; phosphotriesterase core homology <PPPC> F:7-268/Domain: phosphoesterase core homology <PEC> F:35-103/Domain: phosphoesterase core homology <PEC> F:69-101,151-227/Binding site: iron (Asp, His, Asp) #status predicted							
F:72-102,251/Active site: Asp, His, Tyr #status predicted								
F:73-200/Binding site: substrate phosphate (Arg) #status predicted								
Query Match	69.4%;	Score 34;	DB 1;	Length 291;				
Best Local Similarity	77.8%;	Pred. No. 26;						
Matches	7;	Conservative	0;	Mismatches	2;	Indels	0;	Gaps 0;
Qy	1 HSFSGVAV 9	:						
Db	128 HSFGVFSV 136							
RESULT 13								
B64688	Glyceraldehyde-3-phosphate dehydrogenase (phosphorylating) (EC 1.2.1.12) - Helicobacter pylori							
C;Species:	Helicobacter pylori							
C;Date:	09-Aug-1997 #sequence_revision 09-Aug-1997 #text_change 09-Jul-2004							
C;Accession:	B64688							
R;Tomb, J.F.; White, O.; Kerlavage, A.R.; Clayton, R.A.; Sutton, G.G.; Fleischmann, R.D.; Peterson, S.; Loftus, B.; Richardson, D.; Dodson, R.; Khalak, H.G.; Glodek, A.; McKenna, J.D.; Kelley, J.M.; Cottam, M.D.; Weidman, J.M.; Fujii, C.; Bowman, C.; Watthey, L.	Nature 388, 539-547, 1997							
A;Author:	Wallin, E.; Hayes, W.S.; Borodovsky, M.; Karpk, P.D.; Smith, H.O.; Fraser, C.							
A;Title:	The complete genome sequence of the gastric pathogen Helicobacter pylori.							
A;Reference number:	A64688; PMID:97394467; PMID:3252185							
A;Status:	preliminary; nucleic acid sequence not shown; translation not shown							
A;Molecule type:	DNA							
A;Residues:	1-330 <TOM>							
A;Cross-references:	UNIPROT:O05902; UNIPARC:UPI000000D154; GB:AE000635; GB:AE000511; NID							
C;Superfamily:	glyceraldehyde-3-phosphate dehydrogenase							
C;Keywords:	glycolysis; NAD; oxidoreductase							
P;149,176/Active site:	Cys, His #status predicted							
Query Match	69.4%;	Score 34;	DB 2;	Length 330;				
Best Local Similarity	50.0%;	Pred. No. 30;						
Matches	5;	Conservative	3;	Mismatches	2;	Indels	0;	Gaps 0;
Qy	1 HSFSGVAV 10	:						
Db	148 HSFGVFSV 155							

RESULT 16
T04340 beta-galactosidase (EC 3.2.1.23) II precursor - tomato
C;Species: *Lycopersicon esculentum* (Tomato)
C;Accession: T04340 #sequence_revision 23-Apr-1999 #text_change 09-Jul-2004
R;Smith, D.L.; Starrett, D.A.; Gross, K.C.
Plant Physiol. 117, 417-423, 1998
A;Title: A gene coding for tomato fruit beta-galactosidase II is expressed during fruit
A;Reference number: Z15236; MUID:96289087; PMID:9625694
A;Status: translated from GB/EMBL/DBJ
A;Molecule type: mRNA
A;Cross-references: UNIPROT:Q91100; UNIPARC:UPI00000ACT74; EMBL:AF020390; NID:93299895;
A;Experimental source: strain Rutgers; tissue-type tomato fruit
C;Genetics:
A;Gene: *Bgal4*
C;Superfamily: beta-galactosidase bga
C;Keywords: Glycosidase; hydrolase
F:1-23/Domain: signal sequence #status predicted <SIG>
Query Match 69.4%; Score 34; DB 2; Length 724;
Best Local Similarity 70.0%; Pred. No. 68;
Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;
Qy 1 HSFSGVAV 10
Db 594 HSLSGSSSVE 603

RESULT 17
AB2457 Two-component hybrid sensor and regulator al15210 [imported] - *Nostoc* sp. (strain PCC 711
C;Species: *Nostoc* sp. PCC 7120
A;Note: *Nostoc* sp. strain PCC 7120 is a synonym of *Anabaena* sp. strain PCC 7120
C;Date: 14-Dec-2001 #sequence_revision 14-Dec-2001 #text_change 09-Jul-2004
C;Accession: AB2457
R;Kaneko, T.; Nakamura, Y.; Wolk, C.P.; Kuritz, T.; Sasamoto, S.; Watanabe, A.; Iriuchi, N.; Shimpo, S.; Sugimoto, M.; Takazawa, M.; Yamada, M.; Tabata, S.
DNA Res. 8, 205-211, 2001
A;Title: Complete Genomic Sequence of the Filamentous Nitrogen-fixing Cyanobacterium *Anabaena* sp. strain PCC 7120
A;Reference number: AB1807; MUID:21595285; PMID:11759840
A;Accession: AB2457
A;Status: preliminary
A;Molecule type: DNA
A;Cross-references: UNIPROT:Q9YL76; UNIPARC:UPI00000CEDCF; GB:BA0000019; PIDN:BAB76909.1;
A;Experimental source: strain PCC 7120
C;Genetics:
A;Gene: al15210
Query Match 69.4%; Score 34; DB 2; Length 1558;
Best Local Similarity 60.0%; Pred. No. 1.5e+02;
Matches 6; Conservative 2; Mismatches 2; Indels 0; Gaps 0;
Qy 1 HSFSGVAV 10
Db 153 HNYRGVAVAE 162

RESULT 18
S03380 major fecal allergen Der P I - house-dust mite (*Dermatophagoides pteronyssinus*) (fragment)
N;Alternate names: allergen Der p1
C;Species: *Dermatophagoides pteronyssinus*
C;Date: 05-Mar-1995 #sequence_revision 01-Sep-1995 #text_change 09-Jul-2004
C;Accession: S03380
Query Match 67.3%; Score 33; DB 2; Length 149;
Best Local Similarity 75.0%; Pred. No. 20;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
R;Simpson, R.J.; Nice, E.C.; Moritz, R.L.; Stewart, G.A.
Protein Seq. Data Anal. 2, 17-21, 1989
A;Title: Structural studies on the allergen Der p1 from the house dust mite *Dermatophagoides pteronyssinus*
A;Reference number: A31657; MUID:85098855; PMID:2911558

RESULT 19
T15911 hypothetical protein E04F6.8 - *Caenorhabditis elegans*
C;Species: *Caenorhabditis elegans*
C;Date: 20-Sep-1999 #sequence_revision 20-Sep-1999 #text_change 09-Jul-2004
R;Pauley, A.
C;Accession: T15911
Submitted to the EMBL Data Library, June 1995
A;Description: The sequence of *C. elegans* cosmid E04F6.
A;Reference number: T15911
A;Status: preliminary; translated from GB/EMBL/DBJ
A;Molecule type: DNA
A;Residues: 1-128 <PAU>
A;Cross-references: UNIPROT:Q19063; UNIPARC:UPI0000077294; EMBL:U28943; NID:g861333;
A;Experimental source: strain Bristol N2
C;Genetics:
A;Gene: CESP:E04F6.8
A;Introns: 29/3; 10/4/3
Query Match 67.3%; Score 33; DB 2; Length 128;
Best Local Similarity 75.0%; Pred. No. 17;
Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 HSFSGVAV 8
Db 113 HGFSEVAA 120

RESULT 20
AI2669 conserved hypothetical protein Atu0759 [imported] - *Agrobacterium tumefaciens* (strain C;Species: *Agrobacterium tumefaciens*
C;Date: 11-Jan-2002 #sequence_revision 11-Jan-2002 #text_change 09-Jul-2004
C;Accession: AI2669
R;Wood, D.W.; Setubal, J.C.; Kaul, R.; Monks, D.; Chen, L.; Wood, G.B.; Chen, Y.; Woledge, G.; Gillet, W.; Grant, C.; Guenthner, D.; Kutayavim, T.; Levy, R.; Li, M.; McClellan, Karp, P.; Romero, P.; Zhang, S.
Science 294, 2317-2323, 2001
A;Authors: Yoo, H.; Tao, Y.; Biddle, P.; Jung, M.; Krespan, W.; Perry, M.; Gordon-Koster, E.W.
A;Title: The Genome of the Natural Genetic Engineer *Agrobacterium tumefaciens* C58.
A;Reference number: AB2577; MUID:21608550; PMID:11743193
A;Accession: AI2669
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-149 <KUR>
A;Cross-references: UNIPROT:Q8UHC3; UNIPARC:UPI00000D1901; GB:AE008688; PIDN:AAI41775
A;Experimental source: strain C58 (Dupont)
C;Genetics:
A;Gene: Atu0759
A;Map position: circular chromosome

Qy 1 HSFGVAVS 8
 Db 1||| :
 121 HSPEGVAA 128

RESULT 21
hypothetical protein AGR_C_11378 [imported] - Agrobacterium tumefaciens (strain C58, Cere C;Species: Agrobacterium tumefaciens
C;Date: 30-Sep-2001 #sequence_revision 30-Sep-2001 #text_change 09-Jul-2004
C;Accession: G97451
R;Goodner, B.; Hinkle, G.; Gattung, S.; Miller, N.; Ourollo, B.; Goldman, A.; Liu, F.; Wollam, C.; Allinger, M.; Dougherty, D.; Scott, C.; Lappas, C.; Markelz, B.; Science 294, 2323-2328, 2001
A;Title: Genome Sequence of the Plant Pathogen and Biotechnology Agent Agrobacterium tum A;Reference number: A97359; MUID:21608551; PMID:11743154
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-149 <KUR>
A;Cross-references: UNIPROT:Q8UHC3 ; UNIPARC:UPI000000D1901; GB:AE007869; PIDN:ARK86568.1;
C;Genetics:
A;Gene: AGR_C_1378
A;Map position: circular chromosome

Query Match 67.3%; Score 33; DB 2; Length 149;
 Best Local Similarity 75.0%; Pred. No. 20;
 Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFGVAVS 8
 Db 1||| :
 121 HSPEGVAA 128

RESULT 22
hypothetical protein 1 - Azospirillum brasiliense
C;Species: Azospirillum brasiliense
C;Date: 13-Jan-1995 #sequence_revision 13-Jan-1995 #text_change 09-Jul-2004
C;Accession: S17702
R;Zimmer, W.; Aparicio, C.; Elmerich, C.
Mol. Gen. Genet. 229, 41-51, 1991
A;Title: Relationship between tryptophan biosynthesis and indole-3-acetic acid production
A;Reference number: S17702; MUID:9137549; PMID:1896020
A;Accession: S17702
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-150 <ZIM>
A;Cross-references: UNIPROT:P26943; UNIPARC:UPI00013C156; EMBL:X57853; NID:948840; PIDN:BB8727

Query Match 67.3%; Score 33; DB 2; Length 150;
 Best Local Similarity 60.0%; Pred. No. 21;
 Matches 6; Conservative 2; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSFGVAVS 10
 Db 51 HAFAGVTVKE 60

RESULT 23
UDP-N-acetylglucosamine acetyltransferase PA3644 [imported] - Pseudomonas aeruginosa (stra C;Species: Pseudomonas aeruginosa
C;Date: 15-Sep-2000 #sequence_revision 15-Sep-2000 #text_change 09-Jul-2004
C;Accession: D83190
R;Stover, C.K.; Pham, X.Q.; Erwin, A.L.; Mizoguchi, S.D.; Warrener, P.; Hickey, M.J.; Badman, S.; Yuan, Y.; Brody, L.L.; Coulter, S.N.; Polger, K.R.; Kas, A.; Larbig, K.; Lim, J.; Lory, S.; Olson, M.V.
Nature 406, 959-964, 2000
*A;Title: Complete genome sequence of *Pseudomonas aeruginosa* PA01, an opportunistic patho A;Reference number: A82950; MUID:2043737; PMID:10984043*
A;Accession: D83190
A;Status: preliminary

RESULT 26
B64902 hypothetical protein b1490 - Escherichia coli (strain K-12)
C;Species: Escherichia coli
C;Date: 12-Sep-1997 #sequence_revision 17-Sep-1997 #text_change 09-Jul-2004
R;Blattner, F.R.; Plunkett III, G.; Bloch, C.A.; Perna, N.T.; Burland, V.; Riley, M.; Co
A.; Rose, D.J.; Maiu, B.; Shao, Y.
A;Title: The complete genome sequence of Escherichia coli K-12.
A;Reference number: A64720; MUID:97426617; PMID:9278503
A;Experimental source: strain K-12; substring MG1655
A;Status: nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-460 <BLAT>
A;Cross-references: UNIPROT:P77793; UNIPARC:UPI000013A946; GB:AE000246; NID:9
Qy 1 HSFSGVAVS 9
Db 227 HYFSGAEV 235
RESULT 27
S19729 xylose-1,4-beta-xylotidase (EC 3.2.1.37) - Bacillus pumilus
C;Species: Bacillus pumilus
C;Date: 22-Nov-1993 #sequence_revision 10-Nov-1995 #text_change 09-Jul-2004
R;Xu, W.Z.; Shima, Y.; Negoro, S.; Urabe, I.
Eur. J. Biochem. 202, 1197-1203, 1991
A;Title: Sequence and properties of beta-xylosidase from Bacillus pumilus IPO. Contradic-
A;Reference number: S19729; MUID:9211146; PMID:1765080
A;Accession: S19729
A;Molecule type: DNA
A;Residues: 1-335 <XW>
A;Cross-references: UNIPROT:P07129; UNIPARC:UPI000013908B; EMBL:X05793; PIDN
A;Experimental source: strain IPO
C;Genetics:
A;Gene: xynB
C;Function:
A;Start codon: TTG
A;Description: hydrolysis of 1,4-beta-D-xylan
C;Keywords: glycosidase; hydrolase; polysaccharide degradation
Qy 1 HSFSGVAVS 9
Db 152 HSFAGIALQE 161
RESULT 28
C96654 hypothetical protein F16P17.10 [imported] - Arabidopsis thaliana (mouse-ear cress)
C;Species: Arabidopsis thaliana (mouse-ear cress)
C;Accession: C96654
R;Theologis, A.; Ecker, J.R.; Palm, C.J.; Federspiel, N.A.; Kaul, S.; Alonso, O.; Alonso,
Chin, C.W.; Chung, M.K.; Conn, L.; Conway, A.R.; Creasy, T.H.; Dewar, K.;
Anser, N.F.; Hughes, B.; Huijzer, L.
Nature 408, 816-820, 2000
A;Authors: Hunter, J.L.; Jenkins, J.; Johnson-Hopson, C.; Khan, S.; Khaykin, E.; Kim, C.

C.A.; Li, J.H.; Li, Y.; Lin, X.; Liu, S.X.; Liu, Z.A.; Luos, J.S.; Maiti, R.; Marzia
Rizzo, M.; Rooney, T.; Rowley, D.; Sakano, H.
A;Authors: Salzberg, S.L.; Schwartz, J.R.; Shinn, P.; Southwick, A.M.; Sun, H.; Talc
ker, M.; Wu, D.; Yu, G.; Fraser, C.M.; Venter, J.C.; Davis, R.W.
A;Title: Sequence and analysis of chromosome 1 of the plant Arabidopsis.
A;Reference number: A86141; MUID:21016719; PMID:11130712
A;Accession: C96654
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-990 <STO>
A;Cross-references: UNIPROT:Q9LQ11; UNIPARC:UPI00000483E9; GB:AE005173; NID:98493583;
C;Genetics:
A;Gene: F16P17.10
A;Map position: 1
C;Superfamily: Receptor-like protein kinase
Query Match Score 33; DB 2; Length 890;
Best Local Similarity 70.0%; Pred. No. 1.4e+02; Mismatches 1; Indels 2; Gaps 0;
Qy 1 HSFSGVAVS 10
Db 251 NSFDGVASFE 260
RESULT 29
G71286 probable pyruvate, phosphate dikinase - syphilis spirochete
C;Species: Treponema pallidum subsp. pallidum (syphilis spirochete)
C;Date: 24-Jul-1998 #sequence_revision 24-Jul-1998 #text_change 09-Jul-2004
C;Accession: G71286
R;Fraser, C.M.; Morris, S.J.; Weinstock, G.M.; White, O.; Sutton, G.G.; Dodson, R.; C
erson, J.; Khalak, H.; Richardson, D.; Howell, J.K.; Chidambaram, M.; Utterback, T.; N
they, I.; Weidman, J.; Smith, H.O.; Venter, J.C.
Science 281, 375-388, 1998
A;Title: Complete genome sequence of Treponema pallidum, the syphilis spirochete.
A;Reference number: A71250; MUID:98332770; PMID:9665876
A;Status: preliminary; nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-901 <COL>
A;Cross-references: UNIPROT:Q83728; UNIPARC:UPI0000131DB6; GB:AE001246; NID:9665876
A;Experimental source: strain Nichols
C;Genetics:
A;Gene: TP0746
C;Superfamily: pyruvate, phosphate dikinase
Query Match Score 33; DB 2; Length 901;
Best Local Similarity 40.0%; Pred. No. 1.4e+02; Mismatches 4; Indels 0; Gaps 0;
Qy 1 HSFSGVAVS 10
Db 720 HAYQIGTSIE 729
RESULT 30
T5253 hypothetical protein B2J23.190 [imported] - Neurospora crassa
C;Species: Neurospora crassa
C;Date: 20-Oct-2000 #sequence_revision 20-Oct-2000 #text_change 09-Jul-2004
C;Accession: T5253
R;Schulte, U.; Aign, V.; Hoheisel, J.; Brandt, P.; Hartmann, B.; Holland, R.; Nyakati
submitted to the Protein Sequence Database, September 2000
A;Accession: T5253
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-1209 <SCH>
A;Cross-references: UNIPROT:Q9HFI3; UNIPARC:UPI000017B49A; EMBL:AL442164; GSPDB:GN00:
A;Experimental source: BAC clone B2J23; strain OR74A
C;Genetics:
A;Gene: NCSP:B2J23.190

A; Map position: 6
A; Introns: 206/2; 752/1; 896/3
Query Match 67.3%; Score 33; DB 2; Length 1209;
Best Local Similarity 60.0%; Pred. No. 1.9e+02;
Matches 6; Conservative 1; Mismatches 3; Indels 0; Gaps 0;
Qy 1 HSFSGVAVS 10
Db 748 HKFSGSICSHB 757

RESULT 31
B69406 probable 3-isopropylmalate dehydratase - Archaeoglobus fulgidus
N:Alternate names: conserved hypothetical protein AF251
C:Species: Archaeoglobus fulgidus
C:Accession: B69406
C:Cross-references: UNIPARC:UPI0000056DD6; EMBL:AL132978
R:Klenk, H.P.; Clayton, R.A.; Tomb, J.F.; White, O.; Nelson, K.E.; Ketchum, K.A.; Dodson, J.; Fleischmann, R.D.; Quackenbush, J.; Lee, N.H.; Sutton, G.G.; Gill, S.; Kirkness, E.F.; Glodek, A.; Zhou, L.; Overbeek, R.; Gocayne, J.D.; Weidman, J.F.; McDonald, L.
Nature 390, 364-370, 1997
A:Authors: Utterback, T.; Cottont, M.D.; Spriggs, T.; Artiach, P.; Kaine, B.P.; Sykes, S.
Smith, H.O.; Weese, C.R.; Venter, J.C.
A:Title: The complete genome sequence of the hyperthermophilic, sulfate-reducing archaeon Archaeoglobus fulgidus
A:Reference number: A69406
A:Status: preliminary; nucleic acid sequence not shown; translation not shown
A:Molecule type: DNA
A:Residues: 1-239 <KLE>
A:Cross-references: UNIPROT:O29017; UNIPARC:UPI0000056DD6; GB:AE0001018; GB:AE000782; NCBI
C:Superfamily: 3-isopropylmalate dehydratase leuD chain

Query Match 65.3%; Score 32; DB 1; Length 239;
Best Local Similarity 60.0%; Pred. No. 55;
Matches 6; Conservative 3; Mismatches 1; Indels 0; Gaps 0;
Qy 1 HSFSGVAVS 10
Db 113 YSFAGVATEE 122

RESULT 32
G86710 conserved hypothetical protein ygii [imported] - Lactococcus lactis subsp. lactis (strains)
C:Species: Lactococcus lactis subsp. lactis
C:Accession: G86710
C:Cross-references: UNIPARC:UPI000005C952; EMBL:AF079317; NID:933782
R:Boilotin, A.; Wincker, P.; Mauger, S.; Jaillon, O.; Malarme, K.; Weissbach, J.; Ehrlich, P.; Lemaire, M.; Stillwell, L.C.; Wong, K.K.; Thurston, S.J.; Sisk, B.C.; Sensen, C.W.
A:Title: The complete genome sequence of the lactic acid bacterium Lactococcus lactis subsp. lactis
A:Reference number: A86625; PMID:21235186; PMID:11337471
A:Status: preliminary
A:Molecule type: DNA
A:Residues: 1-257 <STO>
A:Cross-references: UNIPROT:Q9CHP1; UNIPARC:UPI00000C68A8; GB:AB005176; PID:912723596; F
C:Genetics:
A:Gene: ygii
C:Superfamily: Mg-dependent Dnase, TatD type

Query Match 65.3%; Score 32; DB 2; Length 257;
Best Local Similarity 85.7%; Pred. No. 59;
Matches 6; Conservative 0; Mismatches 1; Indels 0; Gaps 0;
Qy 1 HSFSGVVA 7
Db 154 HSFSGVTA 160

RESULT 33
T23013 hypothetical protein FS9F5.1 - Caenorhabditis elegans
C:Species: Caenorhabditis elegans
C:Accession: T23013
R:Leonard, N.
A:Submitted to the EMBL Data Library, August 1995
A:Reference number: Z19653
A:Accession: T23013
A:Status: preliminary; translated from GB/EMBL/DBJ
A:Molecule type: DNA
A:Residues: 1-417 <WIL>
A:Cross-references: UNIPROT:Q21044; UNIPARC:UPI0000077F2A; EMBL:250794; PIDN:CAA90651

A;Experimental source: clone F59FS
 C;Genetics:
 A;Gene: CRBP:F59FS..1

A;Map Position: X
 A;Introns: 2/3; 38/1; 85/1; 135/3; 178/3; 217/2; 244/3; 286/1
 Query Match 65.3%; Score 32; DB 2; Length 417;
 Best Local Similarity 75.0%; Pred. No. 99;
 Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 Qy 1 HSFSGVAS 8
 Db 344 HNFSGPAS 351

RESULT 36

D82614

Glycinamide ribonucleotide synthetase Xf1976 [imported] - *Xylella fastidiosa* (strain 9as)
 C;Species: *Xylella fastidiosa*
 C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 09-Jul-2004
 C;Accession: D82614
 R;Anonymous, The *Xylella fastidiosa* Consortium of the Organization for Nucleotide Sequen
 Nature 406, 151-157, 2000
 A;Title: The genome sequence of the plant pathogen *Xylella fastidiosa*.
 A;Reference number: A82515; PMID:20365717; PMID:10910347
 A;Note: for a complete list of authors see reference number A59328 below
 A;Accession: D82614
 A;Status: preliminary
 A;Molecule type: DNA
 A;Residues: 1-437 <STIM>
 A;Cross-references: UNIPROT:Q9PC09; UNIPARC:UPI0000132AA4C; GB:AE004017; GB:AE003849; NID
 R;Simpson, A.J.G.; Reinach, F.C.; Arruda, P.; Abreu, F.A.; Acencio, M.; Alvarenga, R.; Carrer, H
 A;Experimental source: strain 9as
 R;Briones, M.R.S.; Bueno, M.R.P.; Canargo, A.A.; Camargo, L.E.A.; Carrero, D.M.; Carrer, H
 A;Authors: Ferreira, V.C.A.; Farro, J.A.; Fraga, J.S.; Franco, S.C.; Frohm
 J.D.; Jungueira, M.L.; Kemper, E.L.; Kitajima, J.E.; Krieger, C.F.M.; Kuramitsu, B.E.; Laiga
 chado, M.A.; Madeira, A.M.B.N.; Madaira, H.M.F.; Marino, C.L.; Marques, M.V.; Martins, E
 A;Authors: Martins, E.M.F.; Matsukuma, A.Y.; Mench, C.F.M.; Miradca, E.C.; Miyaki, C.Y.;
 Oliveira, M.A.; Oliveira, M.C.; de Oliveira, R.C.; Palmieri, D.A.
 Rodrigues, V.; Rosa, A.J. de M.; de Rosa Jr., V.E.; de Sa, R.G.; Santelli, R.V.; Savasak
 A;Authors: da Silva, A.C.R.; da Silva, F.R.; da Silva, A.M.; Silva Jr., W.A.; da Silveir
 M.; Tschalco, M.H.; Vallada, H.; Van Sluyt, M.A.; Verjovski-Almeida, S.; Vettord, A.L.;
 A;Reference number: A59328
 A;Contents: annotation
 C;Genetics:

A;Gene: Xf1976
 C;Superfamily: phosphoribosylamine-glycine ligase hc
 C;Species: Homo sapiens (man)
 C;Date: 11-Jan-2000 #sequence_revision 11-Jan-2000 #text_change 09-Jul-2004
 R;Blecker, H.; Boecher, M.; Brandt, P.; Mewes, H.W.; Gassenhuber, J.; Wiemann, S.
 submitted to the Protein Sequence Database, November 1999
 A;Reference number: 222230
 A;Accession: T42670

RESULT 37

T42670

hypothetical protein DKFZp434C0917.1 - human (fragment)
 C;Species: Homo sapiens (man)
 C;Date: 11-Jan-2000 #sequence_revision 11-Jan-2000 #text_change 09-Jul-2004
 R;Blecker, H.; Boecher, M.; Brandt, P.; Mewes, H.W.; Gassenhuber, J.; Wiemann, S.
 submitted to the Protein Sequence Database, November 1999
 A;Reference number: 222230
 A;Accession: T42670

A;Status: preliminary

A;Molecule type: mRNA

A;Residues: 1-455 <AAA>

A;Cross-references: UNIPROT:Q9UIW8; UNIPARC:UPI000006DB0A; EMBL:AL133070

A;Experimental source: adult testis; clone DkFZp434C0917
 C;Genetics:
 A;Gene: DkFZp434C0917.1

Query Match 65.3%; Score 32; DB 2; Length 455;
 Best Local Similarity 60.0%; Pred. No. 1.1e+02; Mismatches 2; Indels 0; Gaps 0;
 Qy 1 HSFSGVASV 10
 Db 117 HSMNTASVK 126

RESULT 38

E82444

NAD(P) transhydrogenase, beta chain VCA0564 [imported] - *Vibrio cholerae* (strain N169
 C;Species: *Vibrio cholerae*
 C;Date: 18-Aug-2000 #sequence_revision 20-Aug-2000 #text_change 31-Dec-2004
 C;Accession: E82444
 R;Heidelberg, J.P.; Eisen, J.A.; Nelson, W.C.; Clayton, R.A.; Gwinn, M.L.; Dodson, R
 charlson, D.; Brzuska, M.D.; Vanathavan, J.; Bass, S.; Qin, H.; Dragoi, I.; Sellers
 I, R.R.; Mekalanos, J.J.; Venter, J.C.; Frazer, C.M.
 Nature 406, 477-483, 2000
 A;Title: DNA Sequence of both chromosomes of the cholera pathogen *Vibrio cholerae*.
 A;Reference number: A82035; PMID:2046633; PMID:10952301
 A;Accession: E82444
 A;Status: preliminary
 A;Molecule type: DNA
 A;Residues: 1-458 <HEI>
 A;Cross-references: UNIPROT:Q9KM25; UNIPARC:UPI000000C3583; GB:AE004387; GB:AE003853;
 A;Experimental source: serogroup O1; strain N16961; biotype El Tor
 C;Genetics:
 A;Gene: VCA0564
 A;Map position: 2
 C;Superfamily: NAD(P) transhydrogenase, beta subunit; NAD(P)+ transhydrogenase (B-spe
 C;Species: *Vibrio cholerae*

Query Match 65.3%; Score 32; DB 2; Length 458;
 Best Local Similarity 66.7%; Pred. No. 1.1e+02; Mismatches 2; Indels 0; Gaps 0;
 Matches 6; Conservative 1; Mismatches 1;
 Qy 1 HSFSGVASV 9
 Db 91 HSFVGAAV 99

RESULT 39

A81885

probable NAD(P) transhydrogenase (B-specific) (EC 1.6.1.1) beta chain NMA1175 [import
 C;Species: *Neisseria meningitidis*
 C;Date: 05-May-2000 #sequence_revision 05-May-2000 #text_change 31-Dec-2004
 C;Accession: A81885
 R;Parkhill, J.; Achtman, M.; James, K.D.; Bentley, S.D.; Churcher, C.; Klee, S.R.; Mc
 Holroyd, S.; Jagels, K.; Leather, S.; Mungall, K.; Quail, M.A.; Rajand
 Nature 404, 503-506, 2000
 A;Title: Complete DNA sequence of a serogroup A strain of *Neisseria meningitidis* Z2491
 A;Reference number: A81715; PMID:10761919
 A;Accession: A81885
 A;Status: preliminary
 A;Molecule type: DNA
 A;Residues: 1-461 <PAR>
 A;Cross-references: UNIPROT:Q9JURS; UNIPARC:UPI00000C4B2F; GB:AL162755; GB:AL157959;
 A;Keywords: oxidoreductase

C;Genetics:
 A;Gene: pntB; NMA1175
 C;Species: *NM*(P) transhydrogenase, beta subunit; NAD(P)+ transhydrogenase (B-spe
 C;Accession: T21-459/Domain: NAD(P)+ transhydrogenase (B-specific) beta chain homology <TBB>
 Query Match 65.3%; Score 32; DB 2; Length 461;
 Best Local Similarity 66.7%; Pred. No. 1.1e+02; Mismatches 2; Indels 0; Gaps 0;
 Matches 6; Conservative 1;

Qy 1 HSFSGVASV 9

Db 399 HAYGAVSL 407

RESULT 40

T42670

hypothetical protein DKFZp434C0917.1 - human (fragment)
 C;Species: Homo sapiens (man)
 C;Date: 11-Jan-2000 #sequence_revision 11-Jan-2000 #text_change 09-Jul-2004
 R;Blecker, H.; Boecher, M.; Brandt, P.; Mewes, H.W.; Gassenhuber, J.; Wiemann, S.
 submitted to the Protein Sequence Database, November 1999
 A;Reference number: 222230
 A;Accession: T42670

A;Status: preliminary

A;Molecule type: mRNA

A;Residues: 1-455 <AAA>

A;Cross-references: UNIPROT:Q9UIW8; UNIPARC:UPI000006DB0A; EMBL:AL133070

Qy 1 HSFSGVASV 9

Db 91 HSFVGLAAV 99

A;Accession: D64916
A;Status: nucleic acid sequence not shown; translation not shown

A;Molecule type: DNA
A;Residues: 1-462 <BLAT>

A;Cross-references: UNIPARC:UPI000131D63; GB:AE000255; NID:9178785; PID:U00096

A;Experimental source: strain K-12, substrate MG1655
C;Genetics:
A;Gene: pntB
A;Map position: 35 min

C;Complex: heterotetramer; two alpha and two beta chains
C;Function:

A;Description: catalyzes the reversible hydride ion transfer between NAD and NADP;
t

Ane: NAD phosphorylation and dephosphorylation
C;Superfamily: NAD(P) transhydrogenase, beta subunit; NAD(P)+ transhydrogenase (B-sp

C;Keywords: heterotetramer; inner membrane; transmembrane protein; NAD; NADP; oxidor

ane: P5-21/Domain: transmembrane #status predicted <TM1>
P5-21/462/Domain: NAD (P) + transhydrogenase (B-specific) beta chain homology <TBB>

P5-36-52/Domain: transmembrane #status predicted <TM2>
P5-36-75/Domain: transmembrane #status predicted <TM3>

P5-86-102/Domain: transmembrane #status predicted <TM4>

P5-125-141/Domain: transmembrane #status predicted <TM5>

P5-163-179/Domain: transmembrane #status predicted <TM6>

P5-184-200/Domain: transmembrane #status predicted <TM7>

P5-205-221/Domain: transmembrane #status predicted <TM8>

P5-240-256/Domain: transmembrane #status predicted <TM9>

Query Match 65.3%; Score 32; DB 1; Length 462;
Best Local Similarity 66.7%; Pred. No. 1.1e+02; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFSGVAVS 9
Db 91 HSFVGLAAV 99

RESULT 41

NAD(P) transhydrogenase (B-specific) (EC 1.6.1.1) - *Neisseria meningitidis* (strain C81137
C;Species: *Neisseria meningitidis*

C;Date: 31-Mar-2000 #sequence_revision 31-Mar-2000 #text_change 31-Dec-2004
A;Authors: Tettelin, H.; Saunders, N.J.; Jeffries, A.C.; Nelson, K.E.; Eisen, J.A.
Hickey, E.K.; Haft, D.H.; Salzberg, S.L.; White, O.; Fleischmann, R.D.; Dougherty, B.A.;
ri, H.; Qin, H.; Vamatshak, J.; Gill, J.; Scarlato, V.; Msignani, V.; Pizza, M.

A;Title: Complete genome sequence of *Neisseria meningitidis* serogroup B strain MC58.

A;Reference number: A81000; MUID:20175755; PMID:10710307

A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-461 <TEI>

A;Cross-references: UNIPROT:Q9JZM2; UNIPARC:UPI00000C45FB; GB:AE002098; NID:9178785
A;Experimental source: serogroup B, strain MC58

C;Genetics:
A;Gene: NMB0978

C;Superfamily: NAD(P) transhydrogenase, beta subunit; NAD(P) + transhydrogenase (B-specific)
F;21-459/Domain: NAD(P) + transhydrogenase (B-specific) beta chain homology <TBB>

Query Match 65.3%; Score 32; DB 1; Length 462;
Best Local Similarity 66.7%; Pred. No. 1.1e+02; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFSGVAVS 9
Db 91 HSFVGLAAV 99

RESULT 42

NAD(P) transhydrogenase (B-specific) (EC 1.6.1.1) - *Salmonella enterica* subsp. enter

C;Species: *Salmonella enterica* subsp. enterovar Typhi
A;Note: This species has also been called *Salmonella typhi*

C;Date: 09-Nov-2001 #sequence_revision 09-Nov-2001 #text_change 31-Dec-2004

C;Accession: AI0682
R;Parikh, J.; Dougan, G.; James, K.D.; Pickard, D.; Wain, J.J.; Churc

th, T.; Conerton, P.; Cronin, A.; Davis, P.; Dowd, L.; White, N.; Far

, S.; Moule, S.; O'Geora, P.

Nature 413, 848-852, 2001

A;Authors: Parry, C.; Quail, M.; Rutherford, K.; Simmonds, M.; Skeletalton, J.; Stevens,

A;Title: Complete genome sequence of a multiple drug resistant *Salmonella enterica* s

A;Reference number: AB0502; MUID:21534947; PMID:11677608

A;Accession: AI0682
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-462 <BLAT>

A;Cross-references: UNIPARC:UPI000131D63; EMBL:X66086; NID:942455; PID:NID:9216613;

R;Clarke, D.M.; Loo, T.W.; Bragg, S.; Bragg, P.D.

Bur. J. Biochem. 158, 647-653, 1986

A;Title: Nucleotide sequence of the pntA and pntB genes encoding the pyridine nucleotide

A;Reference number: A91172; MUID:92339464; PMID:1633824

A;Accession: S24381
A;Molecule type: DNA
A;Residues: 1-462 <ALIN>

A;Cross-references: UNIPROT:P07002; UNIPARC:UPI000131D63; GB:D10005; GB:000008; GB:X04195; NID:9216613;

R;Tong, R.C.W.; Glavas, N.A.; Bragg, P.D.

Biochim. Biophys. Acta 1080, 19-28, 1991

A;Title: Topological analysis of the pyridine nucleotide transhydrogenase of *Escherichia*

A;Reference number: S18355; MUID:92031646; PMID:1932078

A;Accession: S18427
A;Molecule type: protein
A;Residues: 1-220; ABYVLRLGGCGGLYAQQRPV, 242-462 <CLL>

A;Cross-references: UNIPARC:UPI00017209A; GB:D10005; GB:000008; GB:X04195; NID:9216613;

R;Blattner, F.R.; Plunkett III, G.; Bloch, C.A.; Perna, N.T.; Burland, V.; Riley, M.; Co

A;Title: The complete genome sequence of *Escherichia coli* K-12.

A;Reference number: A64720; MUID:97426617; PMID:9278503
C;Species: *Escherichia coli*

RESULT 43

NAD(P) transhydrogenase (B-specific) (EC 1.6.1.1) beta chain - *Escherichia coli* (str

C;Species: *Escherichia coli*

C;Date: 16-Feb-2001 #sequence_revision 16-Feb-2001 #text_change 31-Dec-2004
C;Accession: A85766
R;Perna, N.T.; Plunkett III, G.; Burland, V.; Mau, B.; Glaser, J.D.; Rose, D.J.; Mayhew
iller, L.; Grotbeck, E.J.; Davis, N.W.; Lim, A.; Dimalanta, E.; Potamousis, K.; Apodaca,
Nature 409, 529-532, 2001
A;Title: Genome sequence of enterohemorrhagic Escherichia coli O157:H7.
A;Reference number: A85480; MUID:21074935; PMID:11206551
A;Status: Preliminary
A;Molecule type: DNA
A;Residues: 1-462 <STO>
A;Cross-references: UNIPROT:P07002; UNIPARC:UPI0000131D63; GB:AE005174; NID:gi12515580;
C;Genetics:
A;Gene: pntB
C;Superfamily: NAD(P) transhydrogenase, beta subunit; NAD(P)+ transhydrogenase (B-specific)
C;Keywords: oxidoreductase

Qy	1 HSFSGVASV 9
	: :
Db	91 HSFVGLAAV 99

RESULT 44
D90917
NAD(P) transhydrogenase (B-specific) (EC 1.6.1.1) beta chain - Escherichia coli (strain C;Species: Escherichia coli
C;Date: 18-Jul-2001 #sequence_revision 18-Jul-2001 #text_change 31-Dec-2004
C;Accession: D90917
R;Hayashi, T.; Makino, K.; Ohnishi, M.; Kurokawa, K.; Ishii, K.; Yokoyama, K.; Han, C.G.
Gasawara, N.; Yasunaga, T.; Kuwara, S.; Shiba, T.; Hattori, M.; Shinagawa, H.
DNA Res. 8, 11-22, 2001
A;Title: Complete genome sequence of enterohemorrhagic Escherichia coli O157:H7 and gene
A;Reference number: A99629; MUID:21156231; PMID:11258796
A;Accession: D90917
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-462 <HAY>
A;Cross-references: UNIPROT:P07002; UNIPARC:UPI0000131D63; GB:BA000007; PIDN:BAB35731.1;
A;Experimental source: strain O157:H7, substrate RIMD 0509352
C;Genetics:
A;Gene: EC83308
C;Superfamily: NAD(P) transhydrogenase, beta subunit; NAD(P)+ transhydrogenase (B-specific)
C;Keywords: oxidoreductase

Qy	1 HSFSGVASV 9
	: :
Db	91 HSFVGLAAV 99

RESULT 45
AG0280
NAD(P) transhydrogenase (AB-specific) (EC 1.6.1.2) - Yersinia pestis (strain CO92)
C;Species: Yersinia pestis
C;Date: 02-Nov-2001 #sequence_revision 02-Nov-2001 #text_change 31-Dec-2004
C;Accession: AG0280
R;Parbhill, J.; Wren, B.W.; Thomson, N.R.; Titball, R.W.; Holden, M.T.G.; Prentice, M.B.
deno-Tarragona, A.M.; Chillingworth, T.; Cronin, A.; Davies, R.M.; Dougan, G.;
il, M.; Rutherford, K.; Simmonds, M.; Shelton, J.; Stevens, K.; Whitehead, S.; Barrell,
Nature 413, 523-527, 2001
A;Title: Genome sequence of Yersinia pestis, the causative agent of plague.
A;Reference number: AB0001; MUID:21470413; PMID:11586360
A;Accession: AG0280
A;Status: preliminary
A;Molecule type: DNA
A;Accession: AG0280

A: Residues: 1-464 <KUR>
A: Cross-references: UNIPROT:Q8Z800 ; UNIPARC:UPI00000DCCF0 ; GB:AL590842 ; PIDN:CAC9110
C: Genetics:
A: Gene: pntB
A: Superfamily: NAD(P) transhydrogenase, beta subunit ; NAD(P) + transhydrogenase (B-sp C: Superfamily: NAD(P) transhydrogenase, beta subunit ; NAD(P) + transhydrogenase (B-sp C: Keywords: oxidoreductase

RESULT 48
F64119 NAD(P) transhydrogenase (B-specific) (EC 1.6.1.1) beta chain - *Haemophilus influenzae* (strain F64119 #sequence_revision 18-Aug-1995 #text_change 31-Dec-2004
C;Species: *Haemophilus influenzae*
C;Date: 18-Aug-1995
C;Accession: F64119
R;Fleischmann, R.D.; Adams, M.D.; White, O.; Clayton, R.A.; Kirkness, E.F.; Kerlavage, A.R.; Gocayne, J.D.; Scott, J.; Shirley, R.; Liu, L.I.; Glodek, A.; Kelley, J.M.; Weidman, J.D.; Brandon, R.C.; Fine, L.D.; Fritchman, J.L.; Fuhrmann, N.S.M.
A;Authors: Gnehm, C.L.; McDonald, L.A.; Small, K.V.; Fraser, C.M.; Smith, H.O.; Venter, A.;Title: Whole-genome random sequencing and assembly of *Haemophilus influenzae* Rd.
A;Reference number: A64000; MUID:95350630; PMID:1542800
A;Accession: F64119
A;Molecule type: DNA
A;Residues: 1-474 <TIGR>
C;Cross-references: UNIPARC:UPI0000131D64; GB:U32816; GB:L42023; NID:915
C;Superfamily: NAD(P) transhydrogenase, beta subunit; NAD(P)+ transhydrogenase (B-specific)
C;Keywords: heterodimer; membrane protein; NAD; oxidoreductase
F;21-474/Domain: NAD(P)+ transhydrogenase (B-specific) beta chain homology <TBB>

Query Match 65.3%; Score 32; DB 2; Length 474;
 Best Local Similarity 66.7%; Pred. No. 1.1e+02;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFGVAVY 9
 ||| :|:
 Db 91 HSFGVGLAAV 99

RESULT 49
S77206 NAD(P) transhydrogenase (B-specific) (EC 1.6.1.1) beta chain - *Synechocystis* sp. (strain S77206 #sequence_revision 25-Apr-1997 #text_change 31-Dec-2004
C;Species: *Synechocystis* sp.
A;Variety: PCC 6803
C;Date: 25-Apr-1997
C;Accession: S77206
R;Kaneko, T.; Sato, S.; Kotani, H.; Tanaka, A.; Asamizu, E.; Nakamura, Y.; Miyajima, N.; O, K.; Okumura, S.; Shimpoo, S.; Takeuchi, C.; Wada, T.; Yamada, A.; Yasuda, DNA Res. 3, 109-13, 1996
A;Title: Sequence analysis of the genome of the unicellular cyanobacterium *Synechocystis* sp.
A;Reference number: S74322; MUID:97061201; PMID:8905231
A;Accession: S77206
A;Status: nucleic acid sequence not shown; translation not shown
A;Molecule type: DNA
A;Residues: 1-480 <KAN>
A;Note: the nucleotide sequence was submitted to the EMBL Data Library, June 1996
A;Gene: pntB
C;Superfamily: NAD(P) transhydrogenase, beta subunit; NAD(P)+ transhydrogenase (B-specific)
F;21-464/Domain: NAD(P)+ transhydrogenase (B-specific) beta chain homology <TBB>

Query Match 65.3%; Score 32; DB 2; Length 480;
 Best Local Similarity 66.7%; Pred. No. 1.2e+02;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFGVAVY 9
 ||| :|:
 Db 91 HSFGVGLAAV 99

RESULT 50
A97659 pyridine nucleotide transhydrogenase beta chain (AY026033) [imported] - *Agrobacterium tumefaciens* (strain A97659 #sequence_revision 30-Sep-2001 #text_change 31-Dec-2004
C;Species: *Agrobacterium tumefaciens*
C;Date: 30-Sep-2001
C;Accession: A97659
R;Goodner, B.; Hinkle, G.; Gattung, S.; Miller, N.; Blanchard, M.; Qurollo, B.; Goldman,

A.; Liu, F.; Wollam, C.; Allinger, M.; Doughty, D.; Scott, C.; Lappas, C.; Markelz, Science 294, 2323-2328, 2001
A;Title: Genome Sequence of the Plant Pathogen and Biotechnology Agent *Agrobacterium* (strain F64119 #sequence_revision 18-Aug-1995 #text_change 31-Dec-2004
A;Reference number: A97359; MUID:21608551; PMID:11743194
A;Status: preliminary
A;Molecule type: DNA
A;Cross-references: UNIPROT:QBUCJO; UNIPARC:UPI00000DF10; GB:AB007865; PIDN:AAK8822
C;Genetics:
A;Gene: AGR_C_4531
A;Map position: circular chromosome
C;SuperFamily: NAD(P) transhydrogenase, beta subunit; NAD(P)+ transhydrogenase (B-specific)
A;Molecule type: DNA
A;Residues: 1-481 <KUR>
C;Cross-references: UNIPROT:QBUCJO; UNIPARC:UPI00000DF10; GB:AB007865; PIDN:AAK8822
A;Accession: F64119
A;Status: preliminary
A;Molecule type: DNA
A;Residues: 1-481 <TIGR>
C;Cross-references: UNIPROT:PA3010; UNIPARC:UPI0000131D64; GB:U32816; GB:L42023; NID:915
C;Superfamily: NAD(P) transhydrogenase, beta subunit; NAD(P)+ transhydrogenase (B-specific)
C;Keywords: heterodimer; membrane protein; NAD; oxidoreductase
F;21-474/Domain: NAD(P)+ transhydrogenase (B-specific) beta chain homology <TBB>

Query Match 65.3%; Score 32; DB 2; Length 481;
 Best Local Similarity 66.7%; Pred. No. 1.2e+02;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFGVAVY 9
 ||| :|:
 Db 95 HSFGVGLAAV 103

Search completed: April 5, 2006, 17:43:51
 Job time : 41 secs

PRIOR FILING DATE: 1999-10-07
 PRIOR APPLICATION NUMBER: 09/1149, 878
 PRIOR FILING DATE: 1998-09-08
 PRIOR APPLICATION NUMBER: 08/993, 432
 PRIOR FILING DATE: 1997-12-18
 NUMBER OF SEQ ID NOS: 7
 SOFTWARE: Microsoft Word 2001.
 SEQ ID NO 5
 LENGTH: 10
 TYPE: PRT
 ORGANISM: Sheep
 LOCATION: 300..309
 OTHER INFORMATION: Polypeptide fragment from fetuin.

US-10-764-945-5

Query Match 93.9%; Score 46; DB 6; Length 10;
 Best Local Similarity 90.0%; Pred. No. 0.004; 1; Mismatches 0; Indels 0; Gaps 0;
 SEQ ID NO 10
 LENGTH: 10

Qy 1 HSFGVAVSE 10
 Db 1 HTFGVAVSE 10

RESULT 5

US-10-764-945-6
 ; Sequence 6, Application US/10764945
 ; Publication No. US20050282738A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Tsai, David.
 ; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
 ; FILE REFERENCE: 2-04-1892
 ; CURRENT APPLICATION NUMBER: US/10/764, 945
 ; PRIOR FILING DATE: 2004-01-26
 ; PRIOR APPLICATION NUMBER: US/10/145, 682
 ; PRIOR FILING DATE: 2002-08-23
 ; PRIOR APPLICATION NUMBER: 09/902, 208
 ; PRIOR FILING DATE: 2001-07-09
 ; PRIOR FILING DATE: 1999-10-07
 ; PRIOR APPLICATION NUMBER: 09/149, 878
 ; PRIOR FILING DATE: 1998-09-08
 ; PRIOR APPLICATION NUMBER: 08/993, 432
 ; PRIOR FILING DATE: 1997-12-18
 ; NUMBER OF SEQ ID NOS: 7
 ; SOFTWARE: Microsoft Word 2001.
 ; SEQ ID NO 6
 ; LENGTH: 10
 ; TYPE: PRT
 ; ORGANISM: Rat

OTHER INFORMATION: Polypeptide fragment from fetuin.

US-10-764-945-6

Query Match 93.9%; Score 46; DB 6; Length 10;
 Best Local Similarity 90.0%; Pred. No. 0.004; 1; Mismatches 0; Indels 0; Gaps 0;
 SEQ ID NO 7
 LENGTH: 10

Qy 1 HSFGVAVSE 10
 Db 1 HTFGVAVSE 10

RESULT 6

US-11-178-143-1
 ; Sequence 1, Application US/11178143
 ; Publication No. US20050277594A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Tsai, David.
 ; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
 ; FILE REFERENCE: 2-04-1892

FILE REFERENCE: 2-04-1892

CURRENT APPLICATION NUMBER: US/11178143
 ; PRIOR FILING DATE: 2005-07-08
 ; PRIOR APPLICATION NUMBER: US/10/772, 537
 ; PRIOR FILING DATE: 2004-02-05
 ; PRIOR APPLICATION NUMBER: 10/145, 682
 ; PRIOR FILING DATE: 2002-05-14
 ; PRIOR APPLICATION NUMBER: 09/902, 208
 ; PRIOR FILING DATE: 2001-07-09
 ; PRIOR FILING DATE: 1999-10-07
 ; PRIOR APPLICATION NUMBER: 09/149, 878
 ; PRIOR FILING DATE: 1998-09-08
 ; PRIOR APPLICATION NUMBER: 08/993, 432
 ; PRIOR FILING DATE: 1997-12-18
 ; NUMBER OF SEQ ID NOS: 7
 ; SOFTWARE: Microsoft Word 2001.
 ; SEQ ID NO 1
 ; LENGTH: 10
 ; TYPE: PRT
 ; ORGANISM: Bovine
 ; LOCATION: 300..309
 ; OTHER INFORMATION: Polypeptide fragment from treatment of fetuin from bovine ser
 ; US-11-178-143-1

Query Match 93.9%; Score 46; DB 7; Length 10;
 Best Local Similarity 90.0%; Pred. No. 0.004; 1; Mismatches 0; Indels 0; Gaps 0;
 SEQ ID NO 2
 LENGTH: 10

Qy 1 HSFGVAVSE 10
 Db 1 HTFGVAVSE 10

RESULT 7

US-11-178-143-5
 ; Sequence 5, Application US/11178143
 ; Publication No. US20050277594A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Tsai, David.
 ; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
 ; FILE REFERENCE: 2-04-1892

CURRENT APPLICATION NUMBER: US/11178143
 ; PRIOR FILING DATE: 2005-07-08
 ; PRIOR APPLICATION NUMBER: US/10/772, 537
 ; PRIOR FILING DATE: 2004-02-05
 ; PRIOR APPLICATION NUMBER: 10/145, 682
 ; PRIOR FILING DATE: 2002-05-14
 ; PRIOR APPLICATION NUMBER: 09/902, 208
 ; PRIOR FILING DATE: 2001-07-09
 ; PRIOR FILING DATE: 1999-10-07
 ; PRIOR APPLICATION NUMBER: 09/149, 878
 ; PRIOR FILING DATE: 1998-09-08
 ; PRIOR APPLICATION NUMBER: 08/993, 432
 ; PRIOR FILING DATE: 1997-12-18
 ; NUMBER OF SEQ ID NOS: 7
 ; SOFTWARE: Microsoft Word 2001.
 ; SEQ ID NO 5
 ; LENGTH: 10
 ; TYPE: PRT
 ; ORGANISM: Sheep
 ; LOCATION: 300..309
 ; OTHER INFORMATION: Polypeptide fragment from fetuin.

Query Match 93.9%; Score 46; DB 7; Length 10;
 Best Local Similarity 90.0%; Pred. No. 0.004; 1; Mismatches 0; Indels 0; Gaps 0;
 SEQ ID NO 6
 LENGTH: 10

Qy 1 HSFGVAVSE 10

RESULT 8

Db	1 HTFSGVAVSE 10	Qy	1 HSFSGVAVSE 10
		Db	313 HTFSGVAVSE 322

US-11-178-143-6
 Sequence 6, Application US/11178143
 Publication No. US20050277594A1
 GENERAL INFORMATION:
 / APPLICANT: Tsai, David.
 / TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
 / TITLE OF INVENTION: Thereof.
 / FILE REFERENCE: 2-04-1832
 CURRENT APPLICATION NUMBER: US/11/178,143
 CURRENT FILING DATE: 2005-07-08
 PRIOR APPLICATION NUMBER: US/10/772,537
 PRIOR FILING DATE: 2004-02-05
 PRIOR APPLICATION NUMBER: 10/145,582
 PRIOR FILING DATE: 2002-05-14
 PRIOR APPLICATION NUMBER: 09/902,208
 PRIOR FILING DATE: 2001-07-09
 PRIOR APPLICATION NUMBER: 09/414,136
 PRIOR FILING DATE: 1999-10-07
 PRIOR APPLICATION NUMBER: 09/149,878
 PRIOR FILING DATE: 1998-09-08
 PRIOR APPLICATION NUMBER: 08/993,432
 PRIOR FILING DATE: 1997-12-18
 NUMBER OF SEQ ID NOS: 7
 SOFTWARE: Microsoft Word 2001.
 SEQ ID NO 6
 LENGTH: 10
 TYPE: PRT
 ORGANISM: Rat
 LOCATION: 3000..309
 OTHER INFORMATION: Polypeptide fragment from fetuin.
 US-11-178-143-6

Query Match Score 93.9%; DB 7; Length 10;
 Best Local Similarity 90.0%; Pred. No. 0.004;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy	1 HSFSGVAVSE 10	Qy	1 HSFSGVAVSE 10
	: :	Db	1 HTFSGVAVSE 10

RESULT 9

US-10-888-962-5
 Sequence 5, Application US/10888962
 Publication No. US20050266531A1
 GENERAL INFORMATION:
 / APPLICANT: Ray, Ranjit
 / APPLICANT: Yie-Hwei, Chang
 / APPLICANT: Ray, Ratna
 / APPLICANT: Basu, Arnab
 / TITLE OF INVENTION: Compositions and Methods for Inhibiting Liver Stellate Cell
 / FILE REFERENCE: SLU 03-013 PCT
 / CURRENT APPLICATION NUMBER: US/10/888,962
 / CURRENT FILING DATE: 2004-07-09
 / PRIOR APPLICATION NUMBER: 60/487,126
 / PRIOR FILING DATE: 2003-07-12
 / NUMBER OF SEQ ID NOS: 15
 / SOFTWARE: PatentIn version 3.2
 / SEQ ID NO 5
 / LENGTH: 359
 / TYPE: PRT
 / ORGANISM: Bos taurus
 US-10-888-962-5

Query Match Score 93.9%; DB 6; Length 359;
 Best Local Similarity 90.0%; Pred. No. 0.17;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

RESULT 10

US-10-764-945-7
 Sequence 7, Application US/10764945
 Publication No. US20050282738A1
 GENERAL INFORMATION:
 / APPLICANT: Tsai, David.
 / TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
 / TITLE OF INVENTION: Thereof.
 / FILE REFERENCE: 2-04-1892
 CURRENT APPLICATION NUMBER: US/10/764,945
 CURRENT FILING DATE: 2004-01-26
 PRIOR APPLICATION NUMBER: US/10/145,682
 PRIOR FILING DATE: 2002-08-23
 PRIOR APPLICATION NUMBER: 09/902,208
 PRIOR FILING DATE: 2001-07-09
 PRIOR APPLICATION NUMBER: 09/414,136
 PRIOR FILING DATE: 1999-10-07
 PRIOR APPLICATION NUMBER: 09/149,878
 PRIOR FILING DATE: 1998-09-08
 PRIOR APPLICATION NUMBER: 08/993,432
 PRIOR FILING DATE: 1997-12-18
 NUMBER OF SEQ ID NOS: 7
 SOFTWARE: Microsoft Word 2001.
 SEQ ID NO 7
 LENGTH: 10
 TYPE: PRT
 ORGANISM: Mouse
 LOCATION: 300..309
 OTHER INFORMATION: Polypeptide fragment from fetuin.
 US-10-764-945-7

Query Match Score 77.6%; DB 6; Length 10;
 Best Local Similarity 80.0%; Pred. No. 0.14;
 Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy	1 HSFSGVAVSE 10	Qy	1 HSFSGVAVSE 10
	: :	Db	1 HAFSPVAVSE 10

RESULT 11

US-11-178-143-7
 Sequence 7, Application US/11178143
 Publication No. US2005277594A1
 GENERAL INFORMATION:
 / APPLICANT: Tsai, David.
 / TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
 / TITLE OF INVENTION: Thereof.
 / FILE REFERENCE: 2-04-1892
 CURRENT APPLICATION NUMBER: US/11/178,143
 CURRENT FILING DATE: 2005-07-08
 PRIOR APPLICATION NUMBER: 09/414,136
 PRIOR FILING DATE: 1999-10-07
 PRIOR APPLICATION NUMBER: 09/149,878
 PRIOR FILING DATE: 1998-09-08
 PRIOR APPLICATION NUMBER: 08/993,432
 PRIOR FILING DATE: 1997-12-18
 NUMBER OF SEQ ID NOS: 7
 SOFTWARE: Microsoft Word 2001.
 SEQ ID NO 7
 LENGTH: 10

TYPE: PRT
ORGANISM: Mouse
LOCATION: 300..309
OTHER INFORMATION: Polypeptide fragment from fetuin.
US-11-178-143-7

Query Match 77.6%; Score 38; DB 6; Length 352;
Best Local Similarity 80.0%; Pred. No. 5.8;
Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
Db 1 HAFSPVAVSE 10

RESULT 14
US-11-112-882-4
; Sequence 4, Application US/11112882
; GENERAL INFORMATION:
; APPLICANT: Commonwealth Scientific and Industrial Research Organisation
; TITLE OF INVENTION: Synthesis of Long-Chain Polyunsaturated Fatty Acids in Recombinant Cell Lines
; FILE REFERENCE: 503244
; CURRENT APPLICATION NUMBER: US/11/112,882
; CURRENT FILING DATE: 2005-04-22
; NUMBER OF SEQ ID NOS: 89
; SEQ ID NO 4
; SOFTWARE: PatentIn version 3.1
; LENGTH: 447
; TYPE: PRT
; ORGANISM: Pavlova salina
; US-11-112-882-4

Query Match 75.5%; Score 37; DB 7; Length 447;
Best Local Similarity 77.8%; Pred. No. 12;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 9
Db 337 HNFEGVAVS 345

RESULT 15
US-11-096-568A-5072
; Sequence 5072, Application US/11096568A
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-159PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 5072
; LENGTH: 441
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(441)
; OTHER INFORMATION: Cereus Seq. ID no. 14306860
; US-11-096-568A-5072

Query Match 73.5%; Score 36; DB 7; Length 441;
Best Local Similarity 70.0%; Pred. No. 18;
Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
Db 84 HSFSGIRSD 93

RESULT 16
US-11-096-568A-5071
; Sequence 5071, Application US/11096568A
; GENERAL INFORMATION:
; Publication No. US20060048240A1
; SEQ ID NO 8
; LENGTH: 352
; TYPE: PRT
; ORGANISM: Rattus norvegicus
; US-10-888-962-8

APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; LENGTH: 498
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(498)
; OTHER INFORMATION: Ceres seq. ID no. 14306859

Query Match 73.5%; Score 36; DB 7; Length 498;
Best Local Similarity 70.0%; Pred. No. 21;
Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 141 HSFSGRSDE 150

RESULT 17
US-11-096-568A-5071
; Sequence 5070, Application US/11/096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; TITLE OF INVENTION: Therry
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 5070
; LENGTH: 500
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1)..(500)
; OTHER INFORMATION: Ceres Seq. ID no. 14306859

Query Match 73.5%; Score 36; DB 7; Length 500;
Best Local Similarity 70.0%; Pred. No. 21;
Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 143 HSFSGRSDE 152

RESULT 18
US-10-498-026-107
; Sequence 107, Application US/10498026
; Publication No. US20060024334A1
; GENERAL INFORMATION:
; APPLICANT: CIRCASSIA LIMITED
; TITLE OF INVENTION: IMMUNOTHERAPEUTIC METHODS AND SYSTEMS
; FILE REFERENCE: N.8730 NO GCN
; CURRENT APPLICATION NUMBER: US/10/498,026
; CURRENT FILING DATE: 2004-06-04
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 107
; LENGTH: 211
; TYPE: PRT
; ORGANISM: Euroglyphus maynei

APPLICANT: CIRCASSIA LIMITED
; TITLE OF INVENTION: ImmunoTherapeutic Methods and Systems
; FILE REFERENCE: N.8730 NO GCN
; CURRENT APPLICATION NUMBER: US/10/498,026
; CURRENT FILING DATE: 2004-06-04
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 108
; LENGTH: 211
; TYPE: PRT
; ORGANISM: Euroglyphus maynei

RESULT 19
US-10-498-026-108
; Sequence 108, Application US/10498026
; Publication No. US20060024334A1
; GENERAL INFORMATION:
; APPLICANT: CIRCASSIA LIMITED
; TITLE OF INVENTION: IMMUNOTHERAPEUTIC METHODS AND SYSTEMS
; FILE REFERENCE: N.8730 NO GCN
; CURRENT APPLICATION NUMBER: US/10/498,026
; CURRENT FILING DATE: 2004-06-04
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 108
; LENGTH: 211
; TYPE: PRT
; ORGANISM: Euroglyphus maynei

Query Match 69.4%; Score 34; DB 6; Length 211;
Best Local Similarity 77.8%; Pred. No. 20;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 2 SFSGVAVSE 10
Db 37 AFSGVAVSE 45

Query Match 69.4%; Score 34; DB 6; Length 211;
Best Local Similarity 77.8%; Pred. No. 20;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 2 SFSGVAVSE 10
Db 37 AFSGVAVSE 45

RESULT 20
US-11-146-428-110
; Sequence 110, Application US/11146428
; Publication No. US2006001847A1
; GENERAL INFORMATION:
; APPLICANT: GUNNARSSON, NINA KATARINA
; APPLICANT: FORSTER, JOCHEN
; APPLICANT: NEILSEN, JENS BREDAAL
; TITLE OF INVENTION: METABOLICALLY ENGINEERED CELLS FOR THE
; PRODUCTION OF POLYUNSATURATED FATTY ACIDS
; FILE REFERENCE: 671306-3001-1
; CURRENT APPLICATION NUMBER: US/11/146,428
; CURRENT FILING DATE: 2005-06-06
; PRIOR APPLICATION NUMBER: 60/577,245
; PRIOR FILING DATE: 2005-06-04
; NUMBER OF SEQ ID NOS: 227
; SOFTWARE: PatentIn Ver. 3.3
; SEQ ID NO 110
; LENGTH: 445
; TYPE: PRT
; ORGANISM: Pavlova lutheri

Query Match 67.3%; Score 33; DB 7; Length 445;
Best Local Similarity 66.7%; Pred. No. 70;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 9
Db 334 HNPDGVGSY 342

RESULT 21
US-11-96-568A-6477
; Sequence 6477, Application US/11096568A

; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 6477
; LENGTH: 143
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: misc_feature
; OTHER INFORMATION: Ceres Seq. ID no. 14315300

Query Match 65.3%; Score 32; DB 7; Length 143;
Best Local Similarity 77.8%; Pred. No. 33; Indels 0; Gaps 0;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 2 SFSGVAVS 10
Db 61 SFSSLASVE 69

RESULT 22
US-11-096-568A-6476
; Sequence 6476, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; TITLE OF INVENTION: Therby
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; SEQ ID NO 6476
; LENGTH: 175
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1) .(175)
; OTHER INFORMATION: Ceres Seq. ID no. 14315299

Query Match 65.3%; Score 32; DB 7; Length 175;
Best Local Similarity 77.8%; Pred. No. 41; Indels 0; Gaps 0;
Matches 7; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 2 SFSGVAVS 10
Db 93 SFSSLASVE 101

RESULT 23
US-11-096-568A-6475
; Sequence 6475, Application US/11096568A
; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; TITLE OF INVENTION: Therby
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; SEQ ID NO 6475
; LENGTH: 181

; Publication No. US20060048240A1
; GENERAL INFORMATION:
; APPLICANT: Alexandrov, Nickolai et al.
; TITLE OF INVENTION: Sequence-Determined DNA Fragments and Corresponding Polypeptides
; FILE REFERENCE: 2750-1592PUS2
; CURRENT APPLICATION NUMBER: US/11/096,568A
; CURRENT FILING DATE: 2005-04-01
; NUMBER OF SEQ ID NOS: 34471
; SEQ ID NO 6477
; LENGTH: 143
; TYPE: PRT
; ORGANISM: Glycine max
; FEATURE:
; NAME/KEY: misc_feature
; LOCATION: (1) .(181)
; OTHER INFORMATION: Ceres Seq. ID no. 14315298
; US-11-096-568A-6475

Query Match 65.3%; Score 32; DB 7; Length 181;
Best Local Similarity 77.8%; Pred. No. 43; Indels 1; Mismatches 1; Indels 0; Gaps 0;

Qy 2 SFSGVAVS 10
Db 99 SFSSLASVE 107

RESULT 24
US-10-467-657-6794
; Sequence 6794, Application US/10467657
; Publication No. US20050260581A1
; GENERAL INFORMATION:
; APPLICANT: CHIRON SPA
; APPLICANT: FONTANA Maria Rita
; APPLICANT: PIZZA Mariagrazia
; APPLICANT: MASIGNANI Vega
; APPLICANT: MONACI Elisabetta
; TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
; FILE REFERENCE:
; CURRENT APPLICATION NUMBER: US/10/467,657
; CURRENT FILING DATE: 2003-08-11
; PRIOR APPLICATION NUMBER: GB-0103424-8
; PRIOR FILING DATE: 2001-02-12
; NUMBER OF SEQ ID NOS: 9118
; SOFTWARE: SeqWin99, version 1.04
; SEQ ID NO 6794
; LENGTH: 461
; TYPE: PRT
; ORGANISM: Neisseria gonorrhoeae
; US-10-467-657-6794

Query Match 65.3%; Score 32; DB 6; Length 461;
Best Local Similarity 66.7%; Pred. No. 1.1e+02; Indels 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFGVAVS 9
Db 91 HSEVGGLAV 99

RESULT 25
US-10-498-026-109
; Sequence 109, Application US/10498026
; Publication No. US006024334A1
; GENERAL INFORMATION:
; APPLICANT: CIRCASSIA LIMITED
; TITLE OF INVENTION: IMMUNOTHERAPEUTIC METHODS AND SYSTEMS
; FILE REFERENCE: N 87430 WO GCW
; CURRENT APPLICATION NUMBER: US/10/498,026
; CURRENT FILING DATE: 2004-06-04
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 109
; LENGTH: 211
; TYPE: PRT
; ORGANISM: Euroglyphus maynei
; US-10-498-026-109

Query Match 63.1%; Score 31; DB 6; Length 211;
Best Local Similarity 66.7%; Pred. No. 78; Mismatches 2; Indels 1; Indels 0; Gaps 0;

Qy 2 SFSGVAVS 10

APPLICANT: Wayne, Robert Thomas
 APPLICANT: Chua, Kaw-Yan
 TITLE OF INVENTION: CLONING AND SEQUENCING OF ALLERGENS OF
 DERMATOPHAGOIDES (HOUSE DUST MITE)
 FILE REFERENCE: IMI-005CNDV2
 CURRENT APPLICATION NUMBER: US/10/746,909
 CURRENT FILING DATE: 2003-12-23
 PRIOR APPLICATION NUMBER: 08/175,071
 PRIOR FILING DATE: 1993-12-29
 PRIOR APPLICATION NUMBER: 08/107,332
 PRIOR FILING DATE: 1993-08-16
 PRIOR APPLICATION NUMBER: 07/580,655
 PRIOR FILING DATE: 1990-09-11
 PRIOR APPLICATION NUMBER: 07/458,642
 PRIOR FILING DATE: 1990-02-13
 NUMBER OF SEQ ID NOS: 22
 SOFTWARE: PatentIn Ver. 2.0
 SEQ ID NO: 110
 LENGTH: 212
 TYPE: PRT
 ORGANISM: Euroglyphus maynei
 US-10-998-026-110

Qy	2 SFGVAVSE 10	36 AFSGVAAATE 46
Db	: :	

RESULT 26
 US-10-998-026-110
 ; Sequence 110, Application US/10498026
 ; Publication No. US20060024334A1
 ; GENERAL INFORMATION:
 ; APPLICANT: CIRKASSIA LIMITED
 ; TITLE OF INVENTION: IMMUNOTHERAPEUTIC METHODS AND SYSTEMS
 ; FILE REFERENCE: N.87430 NO GCW
 ; CURRENT APPLICATION NUMBER: US/10/498,026
 ; CURRENT FILING DATE: 2004-06-04
 ; NUMBER OF SEQ ID NOS: 118
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO: 110
 ; LENGTH: 212
 ; TYPE: PRT
 ; ORGANISM: Dermatophagooides sp.
 US-10-998-026-110

Query Match	Score 31; DB 6; Length 212;	Best Local Similarity 66.7%; Pred. No. 79; Mismatches 2; Indels 1; Gaps 0;
Qy	2 SFGVAVSE 10	
Db	: :	

RESULT 27
 US-10-946-909-2
 ; Sequence 2, Application US/10746909
 ; Publication No. US20060008873A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Wayne, Robert Thomas
 ; APPLICANT: Chua, Kaw-Yan
 ; TITLE OF INVENTION: CLONING AND SEQUENCING OF ALLERGENS OF
 DERMATOPHAGOIDES (HOUSE DUST MITE)
 ; FILE REFERENCE: IMI-005CNDV2
 ; CURRENT APPLICATION NUMBER: US/10/746,909
 ; CURRENT FILING DATE: 2003-12-23
 ; PRIOR APPLICATION NUMBER: 08/175,071
 ; PRIOR FILING DATE: 1993-12-29
 ; PRIOR APPLICATION NUMBER: 08/107,332
 ; PRIOR FILING DATE: 1993-08-16
 ; PRIOR APPLICATION NUMBER: 07/580,655
 ; PRIOR FILING DATE: 1990-09-11
 ; PRIOR APPLICATION NUMBER: 07/458,642
 ; PRIOR FILING DATE: 1990-02-13
 ; NUMBER OF SEQ ID NOS: 22
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO: 2
 ; LENGTH: 222
 ; TYPE: PRT
 ; ORGANISM: Dermatophagooides sp.
 US-10-746-909-2

Query Match	Score 31; DB 6; Length 222;	Best Local Similarity 66.7%; Pred. No. 82; Mismatches 2; Indels 1; Gaps 0;
Qy	2 SFGVAVSE 10	
Db	: :	

RESULT 28
 US-10-746-909-3
 ; Sequence 3, Application US/10746909
 ; Publication No. US20060008873A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Wayne, Robert Thomas
 ; APPLICANT: Chua, Kaw-Yan
 ; TITLE OF INVENTION: CLONING AND SEQUENCING OF ALLERGENS OF
 DERMATOPHAGOIDES (HOUSE DUST MITE)
 ; FILE REFERENCE: IMI-005CNDV2
 ; CURRENT APPLICATION NUMBER: US/10/746,909
 ; CURRENT FILING DATE: 2003-12-23
 ; PRIOR APPLICATION NUMBER: 08/175,071
 ; PRIOR FILING DATE: 1993-12-29
 ; PRIOR APPLICATION NUMBER: 08/107,332
 ; PRIOR FILING DATE: 1993-08-16
 ; PRIOR APPLICATION NUMBER: 07/580,655
 ; PRIOR FILING DATE: 1990-09-11
 ; PRIOR APPLICATION NUMBER: 07/458,642
 ; PRIOR FILING DATE: 1990-02-13
 ; NUMBER OF SEQ ID NOS: 22
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO: 3
 ; LENGTH: 223
 ; TYPE: PRT
 ; ORGANISM: Dermatophagooides sp.
 US-10-746-909-3

Query Match	Score 31; DB 6; Length 223;	Best Local Similarity 66.7%; Pred. No. 83; Mismatches 2; Indels 1; Gaps 0;
Qy	2 SFGVAVSE 10	
Db	: :	

RESULT 29
 US-10-922-232B-65
 ; Sequence 65, Application US/10922232B
 ; Publication No. US20060024668A1
 ; GENERAL INFORMATION:
 ; APPLICANT: van der Hoek, Cornelia
 ; TITLE OF INVENTION: Coronavirus, nucleic acid, protein, and methods for the generation of vaccines, medicaments and diagnostics.
 ; FILE REFERENCE: 294-226
 ; CURRENT APPLICATION NUMBER: US/10/922-232B
 ; CURRENT FILING DATE: 2004-08-18
 ; PRIOR APPLICATION NUMBER: US 60/535,002
 ; PRIOR FILING DATE: 2004-01-07
 ; PRIOR APPLICATION NUMBER: EP 03077602.5
 ; PRIOR FILING DATE: 2003-08-18
 ; PRIOR APPLICATION NUMBER: EP 04075050.7
 ; PRIOR FILING DATE: 2004-01-07
 ; NUMBER OF SEQ ID NOS: 66
 ; SOFTWARE: PatentIn version 3.1
 ; SEQ ID NO: 65
 ; LENGTH: 226
 ; TYPE: PRT
 ; ORGANISM: Artificial Sequence
 ; FEATURE: OTHER INFORMATION: Synthetic sequence.
 ; OTHER INFORMATION: Other information: rix/glycoprotein.
 US-10-922-232B-65

Query Match	Score 31; DB 6; Length 226;	Best Local Similarity 87.5%; Pred. No. 84; Mismatches 1; Indels 0; Gaps 0;
Qy	3 FSGVAVSE 10	
Db	: :	

RESULT 30
 US-11-087-099-11161
 ; Sequence 11161, Application US/11087099
 ; Publication No. US20060041961A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Wayne, Robert Thomas
 ; APPLICANT: Chua, Kaw-Yan
 ; TITLE OF INVENTION: CLONING AND SEQUENCING OF ALLERGENS OF
 DERMATOPHAGOIDES (HOUSE DUST MITE)
 ; FILE REFERENCE: IMI-005CNDV2
 ; CURRENT APPLICATION NUMBER: US/11087099
 ; CURRENT FILING DATE: 2004-08-18
 ; PRIOR APPLICATION NUMBER: 08/175,071
 ; PRIOR FILING DATE: 1993-12-29
 ; PRIOR APPLICATION NUMBER: 08/107,332
 ; PRIOR FILING DATE: 1993-08-16
 ; PRIOR APPLICATION NUMBER: 07/580,655
 ; PRIOR FILING DATE: 1990-09-11
 ; PRIOR APPLICATION NUMBER: 07/458,642
 ; PRIOR FILING DATE: 1990-02-13
 ; NUMBER OF SEQ ID NOS: 22
 ; SOFTWARE: PatentIn Ver. 2.0
 ; SEQ ID NO: 2
 ; LENGTH: 222
 ; TYPE: PRT
 ; ORGANISM: Synthetic sequence.
 ; OTHER INFORMATION: Other information: rix/glycoprotein.
 US-11-087-099-11161

Query Match	Score 31; DB 6; Length 226;	Best Local Similarity 87.5%; Pred. No. 84; Mismatches 1; Indels 0; Gaps 0;
Qy	3 FSGVAVSE 10	
Db	: :	

GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53430)B EP
; CURRENT APPLICATION NUMBER: US/11/097,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12444
; SEQ ID NO: 11161
; LENGTH: 307
; TYPE: PRT
; ORGANISM: Trichodesmium erythraeum IMS101

Query Match 63.3%; Score 31; DB 7; Length 307;
Best Local Similarity 66.7%; Pred. No. 1.2e+02;
Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSFGVAVS 9
Db 88 HRFGVINV 96

RESULT 31
US-10-498-026-21
; Sequence 21, Application US/10498026
; Publication No. US20060024334A1
; GENERAL INFORMATION:

; APPLICANT: CIRCARSTA LIMITED
; TITLE OF INVENTION: IMMUNOTHERAPEUTIC METHODS AND SYSTEMS
; FILE REFERENCE: N-87430 WO GCW
; CURRENT APPLICATION NUMBER: US/10/498,026
; CURRENT FILING DATE: 2004-06-04
; NUMBER OF SEQ ID NOS: 118
; SEQ ID NO: 21
; LENGTH: 319
; TYPE: PRT
; ORGANISM: Dermatophagooides farinae

US-10-498-026-21
Query Match 63.3%; Score 31; DB 6; Length 319;
Best Local Similarity 66.7%; Pred. No. 1.2e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 SFSGVAVS 10
Db 133 AFSGVAAATE 141

RESULT 32
US-10-498-026-13
; Sequence 13, Application US/10498026
; Publication No. US20060024334A1
; GENERAL INFORMATION:
; APPLICANT: CIRCARSTA LIMITED
; TITLE OF INVENTION: IMMUNOTHERAPEUTIC METHODS AND SYSTEMS
; FILE REFERENCE: N-87430 WO GCW
; CURRENT APPLICATION NUMBER: US/10/498,026
; CURRENT FILING DATE: 2004-06-04
; NUMBER OF SEQ ID NOS: 118
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 13
; LENGTH: 320
; TYPE: PRT
; ORGANISM: Dermatophagooides pteronyssinus

US-10-498-026-13
Query Match 63.3%; Score 31; DB 6; Length 320;
Best Local Similarity 66.7%; Pred. No. 1.2e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 SFSGVAVS 10
:|||||:

Db 134 AFSGVAAATE 142

RESULT 33
US-11-102-883-20
; Sequence 20, Application US/11102883
; Publication No. US20050281816A1
; GENERAL INFORMATION:

; APPLICANT: Lamping, Norbert
; APPLICANT: Cramer, Reiko
; APPLICANT: Fluckiger, Sabina
; APPLICANT: Deigle, Isabelle
; TITLE OF INVENTION: Modular Antigen Transporter Molecules (MAT Molecules) for Modulating Immune Reactions, Associated Constructs, Methods
; TITLE OF INVENTION: Modulating Immune Reactions, Associated Constructs, Methods
; FILE REFERENCE: 031002414pa
; CURRENT APPLICATION NUMBER: US/11/102,883
; CURRENT FILING DATE: 2005-04-11
; PRIOR APPLICATION NUMBER: EP02023774.0
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: PCT/EP2003/011190
; PRIOR FILING DATE: 2003-10-09
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO: 20
; LENGTH: 320
; TYPE: PPT
; ORGANISM: Dermatophagooides pteronyssinus

US-11-102-883-20
Query Match 63.3%; Score 31; DB 7; Length 320;
Best Local Similarity 66.7%; Pred. No. 1.2e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
Qy 2 SFSGVAVS 10
Db 134 AFSGVAAATE 142

RESULT 34
US-11-152-811-3
; Sequence 3, Application US/11152811
; Publication No. US20060003414A1
; GENERAL INFORMATION:
; APPLICANT: Matsui, Tomoko
; APPLICANT: Draborg, Henriette
; APPLICANT: Danielsen, Steffen
; TITLE OF INVENTION: Signal Peptide for Producing a Polypeptide
; FILE REFERENCE: 10656.200-US
; CURRENT APPLICATION NUMBER: US/11/152,811
; CURRENT FILING DATE: 2005-06-14
; NUMBER OF SEQ ID NOS: 32
; SOFTWARE: PatentIn version 3.3
; SEQ ID NO: 3
; LENGTH: 320
; TYPE: PPT
; ORGANISM: Dermatophagooides pteronyssinus
; FEATURE:
; NAME/KEY: SIGNAL
; LOCATION: (1)..(18)
; FEATURE:
; NAME/KEY: PROPEP
; LOCATION: (19)..(98)
; FEATURE:
; NAME/KEY: mat_peptide
; LOCATION: (99)..(320)

US-11-152-811-3
Query Match 63.3%; Score 31; DB 7; Length 320;
Best Local Similarity 66.7%; Pred. No. 1.2e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 2 SFSGVAVS 10
:|||||:

```

Db      :|||||: | 134 AFSGVATE 142
; APPLICANT: Retter, Marc W.
; APPLICANT: Fanger, Gary R.
; TITLE OF INVENTION: COMPOSITIONS AND METHODS FOR THE THERAPY
; NUMBER: US-11-102-883-28
; Sequence 28, Application US/11102883
; GENERAL INFORMATION: ; AND DIAGNOSIS OF LUNG CANCER
; FILE REFERENCE: 210121_455C20
; CURRENT APPLICATION NUMBER: US/10/623,155
; CURRENT FILING DATE: 2003-07-17
; NUMBER OF SEQ ID NOS: 560
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 169
; LENGTH: 592
; TYPE: PRT
; ORGANISM: Homo sapiens
; US-10-623-155-169

RESULT 35
; TITLE OF INVENTION: Modular Antigen Transporter Molecules (MAT Molecules) for
; Modulating Immune Reactions, Associated Constructs, Methods and
; TITLE OF INVENTION: Uses Thereof
; FILE REFERENCE: 03100234PA
; CURRENT APPLICATION NUMBER: US/11/102,883
; CURRENT FILING DATE: 2005-04-11
; PRIOR APPLICATION NUMBER: BP02022774.0
; PRIOR FILING DATE: 2002-10-11
; PRIOR APPLICATION NUMBER: PCT/EP2003/011190
; NUMBER OF SEQ ID NOS: 44
; SOFTWARE: Patentin version 3.2
; SEQ ID NO 28
; LENGTH: 351
; TYPE: PRT
; ORGANISM: tat-Li-der p 1
; US-11-102-883-28

Query Match Score 31; DB 7; Length 351;
Best Local Similarity 66.7%; Pred. NO. 1.3e+02; 1; Indels 0; Gaps 0;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy      2 SPSGVASV 10
Db      :|||||: | 165 AFSGVATE 173
; SEQ ID NO 28
; LENGTH: 351
; TYPE: PRT
; ORGANISM: tat-Li-der p 1
; US-11-102-883-28

RESULT 36
; Sequence 5245, Application US/11087099
; GENERAL INFORMATION: ; AND DIAGNOSIS OF LUNG CANCER
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(534)(B) EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12444
; SEQ ID NO 5245
; LENGTH: 593
; TYPE: PRT
; ORGANISM: Schizosaccharomyces pombe
; US-11-087-099-5245

Query Match Score 31; DB 7; Length 583;
Best Local Similarity 66.7%; Pred. NO. 2.3e+02; 2; Indels 0; Gaps 0;
Matches 6; Conservative 3; Mismatches 3; Indels 0; Gaps 0;

Qy      1 HSFSGVAV 9
Db      268 HSFKGFCSV 276
; SEQ ID NO 5245
; LENGTH: 593
; TYPE: PRT
; ORGANISM: Schizosaccharomyces pombe
; US-11-087-099-5245

RESULT 37
; Sequence 169, Application US/10623155
; Publication No. US20050261166A1
; GENERAL INFORMATION: ; AND DIAGNOSIS OF LUNG CANCER
; FILE REFERENCE: 210121_455C20
; CURRENT APPLICATION NUMBER: US/10/623,155
; CURRENT FILING DATE: 2003-07-17
; NUMBER OF SEQ ID NOS: 560
; SOFTWARE: FastSEQ for Windows Version 4.0
; SEQ ID NO 430
; LENGTH: 881

```


; APPLICANT: FONTANA Maria Rita
 ; APPLICANT: PIZZA Mariagrazia
 ; APPLICANT: MASNIGANI Vega
 ; APPLICANT: MONACI Elisabeta
 ; TITLE OF INVENTION: GONOCOCCAL PROTEINS AND NUCLEIC ACIDS
 ; FILE REFERENCE:
 ; CURRENT APPLICATION NUMBER: US/10/467,657
 ; CURRENT FILING DATE: 2003-08-11
 ; PRIOR APPLICATION NUMBER: GB-0103424-B
 ; PRIOR FILING DATE: 2001-02-12
 ; NUMBER OF SEQ ID NOS: 9218
 ; SOFTWARE: Seqwin99, version 1.04
 ; SEQ ID NO: 9192
 ; LENGTH: 163
 ; TYPE: PRT
 ; ORGANISM: Neisseria gonorrhoeae
 ; US-10-467-657-9192

Query Match 61.2%; Score 30; DB 6; Length 183;
 Best Local Similarity 66.7%;
 Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSFSGVAV 9
 Db 23 HTFSGEAPV 31

RESULT 45

; Sequence 10, Application US/10798579A
 ; Publication No. US20060005281A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Kirin Beer Kabushiki Kaisha; Japan International Research Center for Agricultural Sciences
 ; TITLE OF INVENTION: A production of Plants having improved rooting efficiency and resistance to environmental stress-resistant gene
 ; FILE REFERENCE: PH-2034
 ; CURRENT APPLICATION NUMBER: US/10/798,579A
 ; CURRENT FILING DATE: 2004-03-12
 ; PRIOR APPLICATION NUMBER: JP 2003-071082
 ; PRIOR FILING DATE: 2003-03-14
 ; NUMBER OF SEQ ID NOS: 30
 ; SEQ ID NO: 10
 ; LENGTH: 330
 ; TYPE: PRT
 ; ORGANISM: Arabidopsis thaliana
 ; US-10-798-579A-10

Query Match 61.2%; Score 30; DB 6; Length 330;
 Best Local Similarity 40.0%;
 Matches 4; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFSGVAV 10
 Db 320 HEFNGLSSLD 329

RESULT 46

; Sequence 10, Application US/10807475B
 ; Publication No. US20060015973A1
 ; GENERAL INFORMATION:
 ; APPLICANT: SHINOZAKI, Kazuko;
 ; APPLICANT: KASUGA, Mie;
 ; TITLE OF INVENTION: Environmental stress-tolerant plants
 ; CURRENT APPLICATION NUMBER: US/10/887,475B
 ; CURRENT FILING DATE: 2004-07-08
 ; PRIOR APPLICATION NUMBER: US 10/664,771
 ; PRIOR FILING DATE: 2003-09-19
 ; PRIOR APPLICATION NUMBER: US 09/301,217
 ; PRIOR FILING DATE: 1999-04-28

; PRIOR APPLICATION NUMBER: JP 10-292348
 ; PRIOR FILING DATE: 1998-10-14
 ; NUMBER OF SEQ ID NOS: 75
 ; SEQ ID NO: 10
 ; LENGTH: 330
 ; TYPE: PRT
 ; ORGANISM: Arabidopsis thaliana
 ; US-10-887-475B-10

Query Match 61.2%; Score 30; DB 6; Length 330;
 Best Local Similarity 40.0%;
 Matches 4; Conservative 5; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFSGVAV 10
 Db 320 HEFNGLSSLD 329

RESULT 47

; Sequence 976, Application US/11087099
 ; Publication No. US20060041961A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Abad, Mark S. et al.
 ; TITLE OF INVENTION: Genes and Uses for Plant Improvement
 ; FILE REFERENCE: 38-21(5450)B EP
 ; CURRENT APPLICATION NUMBER: US/11/087,099
 ; CURRENT FILING DATE: 2005-03-22
 ; NUMBER OF SEQ ID NOS: 12464
 ; SEQ ID NO: 976
 ; LENGTH: 387
 ; TYPE: PRT
 ; ORGANISM: Gaemannomyces graminis var. tritici
 ; US-11-087-099-976

Query Match 61.2%; Score 30; DB 7; Length 387;
 Best Local Similarity 85.7%;
 Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 4 SGAVSE 10
 Db 285 SGAVSIE 291

RESULT 48

; Sequence 6374, Application US/11087099
 ; Publication No. US20060041961A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Abad, Mark S. et al.
 ; TITLE OF INVENTION: Genes and Uses for Plant Improvement
 ; FILE REFERENCE: 38-21(5450)B EP
 ; CURRENT APPLICATION NUMBER: US/11/087,099
 ; CURRENT FILING DATE: 2005-03-22
 ; NUMBER OF SEQ ID NOS: 12464
 ; SEQ ID NO: 6374
 ; LENGTH: 387
 ; TYPE: PRT
 ; ORGANISM: Gaemannomyces graminis var. graminis
 ; US-11-087-099-6374

Query Match 61.2%; Score 30; DB 7; Length 387;
 Best Local Similarity 85.7%;
 Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 4 SGAVSE 10
 Db 285 SGAVSIE 291

RESULT 49

; Sequence 8098, Application US/11087099
 ; Sequence 8098

```

; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 8098
; LENGTH: 387
; TYPE: PRT
; ORGANISM: Gaeumannomyces graminis var. avenae
US-11-087-099-8098

```

```

Query Match      61.2%; Score 30; DB 7; Length 387;
Best Local Similarity 85.7%; Pred. No. 2.3e+02;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy          4 SGVAVSE 10
           |||||:|
Db          285 SGVAVSE 291

```

```

RESULT 50
US-11-087-099-9490
; Sequence 9490, Application US/11087099
; Publication No. US20060041961A1
; GENERAL INFORMATION:
; APPLICANT: Abad, Mark S. et al.
; TITLE OF INVENTION: Genes and Uses for Plant Improvement
; FILE REFERENCE: 38-21(53450)B EP
; CURRENT APPLICATION NUMBER: US/11/087,099
; CURRENT FILING DATE: 2005-03-22
; NUMBER OF SEQ ID NOS: 12464
; SEQ ID NO 9490
; LENGTH: 87
; TYPE: PRT
; ORGANISM: Gaeumannomyces graminis var. tritici
US-11-087-099-9490

```

```

Query Match      61.2%; Score 30; DB 7; Length 387;
Best Local Similarity 85.7%; Pred. No. 2.3e+02;
Matches 6; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy          4 SGVAVSE 10
           |||||:|
Db          285 SGVAVSE 291

```

Search completed: April 5, 2006, 17:58:44
 Job time : 25 secs

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OM protein - protein search, using sw model

Run on: April 5, 2006, 17:54:38 ; Search time 165 Seconds

(without alignments)
25.323 Million cell updates/secTitle: US-10-772-537-4
Perfect score: 49
Sequence: 1 HSFGVAVVE 10

Scoring table: BL0SUM62

Gapext 0.5

Searched: 1867569 seqs., 417829326 residues

Total number of hits satisfying chosen parameters: 1867569

Minimum DB seq length: 0
Maximum DB seq length: 2000000000Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 100 summariesDatabase : Published Applications AA Main:
1: /cgns_6/podata/1/pubpaa/us07_pubcomb.pep:
2: /cgns_6/podata/1/pubpaa/us08_pubcomb.pep:
3: /cgns_6/podata/1/pubpaa/us09_pubcomb.pep:
4: /cgns_6/podata/1/pubpaa/us10a_pubcomb.pep:
5: /cgns_6/podata/1/pubpaa/us10b_pubcomb.pep:
6: /cgns_6/podata/1/pubpaa/us11_pubcomb.pep:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match	Length	DB	ID	Description
1	49	100.0	10	4	US-10-145_682A-4		Sequence 4, Appli
2	49	100.0	10	4	US-10-221-662-4		Sequence 4, Appli
3	49	100.0	10	4	US-10-267-706-4		Sequence 4, Appli
4	49	100.0	10	5	US-10-772-537-4		Sequence 4, Appli
5	46	93.9	10	4	US-10-145-682A-5		Sequence 1, Appli
6	46	93.9	10	4	US-10-145-682A-5		Sequence 5, Appli
7	46	93.9	10	4	US-10-145-682A-6		Sequence 6, Appli
8	46	93.9	10	4	US-10-221-662-4		Sequence 1, Appli
9	46	93.9	10	4	US-10-221-662-5		Sequence 5, Appli
10	46	93.9	10	4	US-10-221-662-6		Sequence 6, Appli
11	46	93.9	10	4	US-10-267-706-1		Sequence 1, Appli
12	46	93.9	10	4	US-10-267-706-5		Sequence 5, Appli
13	46	93.9	10	4	US-10-267-706-6		Sequence 6, Appli
14	46	93.9	10	5	US-10-772-537-1		Sequence 1, Appli
15	46	93.9	10	5	US-10-772-537-5		Sequence 5, Appli
16	46	93.9	10	5	US-10-772-537-6		Sequence 6, Appli
17	46	93.9	10	4	US-10-415-288-7		Sequence 1, Appli
18	38	77.6	10	4	US-10-415-682A-7		Sequence 5, Appli
19	38	77.6	10	4	US-10-221-662-7		Sequence 6, Appli
20	38	77.6	10	4	US-10-267-706-7		Sequence 7, Appli
21	38	77.6	10	5	US-10-772-537-7		Sequence 7, Appli
22	38	77.6	346	4	US-10-415-288-5		Sequence 5, Appli
23	38	77.6	352	4	US-10-316-253-8		Sequence 84, Appli
24	38	77.6	352	4	US-10-316-253-8		Sequence 86, Appli
25	38	77.6	352	4	US-10-415-288-6		Sequence 6, Appli
26	37	75.5	713	3	US-09-909-320-245		Sequence 245, App
27	37	75.5	713	3	US-09-309-088B-245		Sequence 245, App

2.8	713	3	US-09-905-291A-245	Sequence 245, App
2.9	713	3	US-09-902-853-245	Sequence 245, App
3.0	713	3	US-09-907-824-245	Sequence 245, App
3.1	713	3	US-09-907-841-245	Sequence 245, App
3.2	713	3	US-09-904-011-245	Sequence 245, App
3.3	713	3	US-09-903-640-245	Sequence 245, App
3.4	713	3	US-09-908-093-245	Sequence 245, App
3.5	713	3	US-09-909-742-245	Sequence 245, App
3.6	713	3	US-09-906-820-245	Sequence 245, App
3.7	713	3	US-09-907-613-245	Sequence 245, App
3.8	713	3	US-09-907-942-245	Sequence 245, App
3.9	713	3	US-09-904-859-245	Sequence 245, App
4.0	713	3	US-09-909-204-245	Sequence 245, App
4.1	713	3	US-09-904-820-245	Sequence 245, App
4.2	713	3	US-09-904-786-245	Sequence 245, App
4.3	713	3	US-09-906-646-245	Sequence 245, App
4.4	713	3	US-09-907-736-245	Sequence 245, App
4.5	713	3	US-09-903-786-245	Sequence 245, App
4.6	713	3	US-09-902-903-245	Sequence 245, App
4.7	713	3	US-09-903-749-245	Sequence 245, App
4.8	713	3	US-09-904-119-245	Sequence 245, App
4.9	713	3	US-09-904-820-245	Sequence 245, App
5.0	713	3	US-09-904-956-245	Sequence 245, App
5.1	713	3	US-09-907-794-245	Sequence 245, App
5.2	713	3	US-09-903-943-245	Sequence 245, App
5.3	713	3	US-09-904-620-245	Sequence 245, App
5.4	713	3	US-09-907-925-245	Sequence 245, App
5.5	713	3	US-09-902-692-245	Sequence 245, App
5.6	713	3	US-09-903-520-245	Sequence 245, App
5.7	713	3	US-09-905-056-245	Sequence 245, App
5.8	713	3	US-09-903-064-245	Sequence 245, App
5.9	713	3	US-09-905-381-245	Sequence 245, App
6.0	713	3	US-09-904-485-245	Sequence 245, App
6.1	713	3	US-09-905-348-245	Sequence 245, App
6.2	713	3	US-09-905-088-245	Sequence 245, App
6.3	713	3	US-09-907-575-245	Sequence 245, App
6.4	713	3	US-09-902-615-245	Sequence 245, App
6.5	713	3	US-09-905-075-245	Sequence 245, App
6.6	713	3	US-09-902-63-245	Sequence 245, App
6.7	713	3	US-09-902-711-245	Sequence 245, App
6.8	713	3	US-09-902-977-245	Sequence 245, App
6.9	713	3	US-09-907-977-245	Sequence 245, App
7.0	713	3	US-09-902-615-245	Sequence 245, App
7.1	713	3	US-09-903-925-245	Sequence 245, App
7.2	713	3	US-09-906-760A-245	Sequence 245, App
7.3	713	3	US-09-903-822-245	Sequence 245, App
7.4	713	3	US-09-907-652-245	Sequence 245, App
7.5	713	3	US-09-902-572A-245	Sequence 245, App
7.6	713	3	US-09-902-917-245	Sequence 245, App
7.7	713	3	US-09-905-305-245	Sequence 245, App
7.8	713	3	US-09-905-815A-245	Sequence 245, App
7.9	713	3	US-09-905-449-245	Sequence 245, App
8.0	713	3	US-09-904-806-245	Sequence 245, App
8.1	713	3	US-09-904-920A-245	Sequence 245, App
8.2	713	3	US-09-904-877A-245	Sequence 245, App
8.3	713	3	US-09-903-567-245	Sequence 245, App
8.4	713	3	US-09-903-603A-245	Sequence 245, App
8.5	713	3	US-09-904-522-245	Sequence 245, App
8.6	713	3	US-09-904-766-245	Sequence 245, App
8.7	713	3	US-09-904-920A-245	Sequence 245, App
8.8	713	3	US-09-904-877A-245	Sequence 245, App
8.9	713	3	US-09-906-722A-245	Sequence 245, App
9.0	713	3	US-09-906-617-245	Sequence 245, App
9.1	713	3	US-09-907-728-245	Sequence 245, App
9.2	713	3	US-09-904-805-245	Sequence 245, App
9.3	713	3	US-09-904-918A-245	Sequence 245, App
9.4	713	3	US-09-906-877A-245	Sequence 245, App
9.5	713	3	US-09-909-108-245	Sequence 245, App
9.6	713	3	US-10-125-166-4	Sequence 4, Appli
9.7	713	4	US-10-274-583-22	Sequence 22, Appli
9.8	713	4	US-10-299-976-245	Sequence 245, App
9.9	713	4	US-10-299-917-245	Sequence 245, App
10.0	713	4	US-10-193-477-41	Sequence 41, Appli

SEQ ID NO 4
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Pig
; LOCATION: 300..309
; OTHER INFORMATION: Polypeptide fragment from fetuin.
US-10-772-537-4

Query Match Score 49; DB 5; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0027;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 1 HSFSGVAVSE 10

RESULT 5
US-10-145-682A-1

; Sequence 1, Application US/10145682A
; Publication No. US20030027767A1

; GENERAL INFORMATION:

; APPLICANT: Tsai, David.

; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation

; FILE REFERENCE: 2-04-1892

; CURRENT FILING DATE: 2002-08-23

; PRIOR APPLICATION NUMBER: 09/1902, 208

; PRIOR FILING DATE: 2001-07-09

; PRIOR APPLICATION NUMBER: 09/414,136

; PRIOR FILING DATE: 1999-10-07

; PRIOR APPLICATION NUMBER: 09/149,878

; PRIOR FILING DATE: 1998-09-08

; PRIOR APPLICATION NUMBER: 08/993,432

; PRIOR FILING DATE: 1997-12-18

; NUMBER OF SEQ ID NOS: 7

; SOFTWARE: Microsoft Word 2001.

; SEQ ID NO 1

; LENGTH: 10

; TYPE: PRT

; ORGANISM: Bovine

; LOCATION: 300..309

; OTHER INFORMATION: Polypeptide fragment from treatment of fetuin from bovine sera as described in the specification.

US-10-145-682A-1

Query Match Score 46; DB 4; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.011;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 1 HSFSGVAVSE 10

RESULT 6
US-10-145-682A-5

; Sequence 5, Application US/10145682A
; Publication No. US20030027767A1

; GENERAL INFORMATION:

; APPLICANT: Tsai, David.

; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation

; FILE REFERENCE: 2-04-1892

; CURRENT APPLICATION NUMBER: US/10/145,682A

; PRIOR APPLICATION NUMBER: 09/1902, 208

; PRIOR FILING DATE: 1999-10-07

; PRIOR APPLICATION NUMBER: 09/414,136

; PRIOR FILING DATE: 2001-07-09

; PRIOR APPLICATION NUMBER: 09/149,878

; PRIOR FILING DATE: 1998-09-08

; PRIOR APPLICATION NUMBER: 08/993,432

; PRIOR FILING DATE: 1997-12-18

; NUMBER OF SEQ ID NOS: 7

; SOFTWARE: Microsoft Word 2001.

; SEQ ID NO 1

; LENGTH: 10

; TYPE: PRT

; ORGANISM: Rat

; LOCATION: 300..309

; OTHER INFORMATION: Polypeptide fragment from fetuin.

US-10-145-682A-6

Query Match Score 46; DB 4; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.011;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 1 HSFSGVAVSE 10

RESULT 7
US-10-145-682A-6

; Sequence 6, Application US/10145682A
; Publication No. US20030027767A1

; GENERAL INFORMATION:

; APPLICANT: Tsai, David.

; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation

; FILE REFERENCE: 2-04-1892

; CURRENT APPLICATION NUMBER: US/10/145,682A

; PRIOR APPLICATION NUMBER: 09/1902, 208

; PRIOR FILING DATE: 2002-08-23

; PRIOR APPLICATION NUMBER: 09/414,136

; PRIOR FILING DATE: 1999-10-07

; PRIOR APPLICATION NUMBER: 09/149,878

; PRIOR FILING DATE: 1998-09-08

; PRIOR APPLICATION NUMBER: 08/993,432

; PRIOR FILING DATE: 1997-12-18

; NUMBER OF SEQ ID NOS: 7

; SOFTWARE: Microsoft Word 2001.

; SEQ ID NO 1

; LENGTH: 10

; TYPE: PRT

; ORGANISM: Sheep

; LOCATION: 300..309

; OTHER INFORMATION: Polypeptide fragment from fetuin.

US-10-145-682A-5

Query Match Score 46; DB 4; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.011;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 1 HSFSGVAVSE 10

RESULT 8
US-10-221-662-1

; Sequence 1, Application US/10221662
; Publication No. US2003005046A1

; GENERAL INFORMATION:

; APPLICANT: Tsai, David.

; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation

; FILE REFERENCE: 2-04-1892

; CURRENT APPLICATION NUMBER: US/10/221,662

; PRIOR APPLICATION NUMBER: 09/1902, 208

; PRIOR FILING DATE: 2002-09-16

; PRIOR APPLICATION NUMBER: 09/414,136

; PRIOR FILING DATE: 2001-07-09

; PRIOR APPLICATION NUMBER: 09/149,878

; PRIOR FILING DATE: 1998-09-08

; PRIOR APPLICATION NUMBER: 08/993,432

; PRIOR FILING DATE: 1997-12-18

; NUMBER OF SEQ ID NOS: 7

; SOFTWARE: Microsoft Word 2001.

; SEQ ID NO 1

; LENGTH: 10

; TYPE: PRT

; ORGANISM: Rat

; LOCATION: 300..309

; OTHER INFORMATION: Polypeptide fragment from fetuin.

US-10-221-662-1

Query Match Score 46; DB 4; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.011;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 1 HSFSGVAVSE 10

PRIOR FILING DATE: 1999-10-07
; PRIOR APPLICATION NUMBER: 09/149,878
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: 08/993,432
; PRIOR FILING DATE: 1997-12-18
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
SEQ ID NO: 1
LENGTH: 10
TYPE: PRT
ORGANISM: Bovine
FEATURE:
LOCATION: 300..309
OTHER INFORMATION: Polypeptide fragment from treatment of fetuin from bovine sera as US-10-221-662-1
OTHER INFORMATION: described in the specification.

Query Match 93.9%; Score 46; DB 4; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.011; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
Db 1 HTFGVAVSE 10

RESULT 9

Sequence 5, Application US/10221662
; Publication No. US2003005046A1
GENERAL INFORMATION:
; APPLICANT: Tsai, David
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; TITLE OF INVENTION: Thereof.
FILE REFERENCE: 2-04-1892
CURRENT APPLICATION NUMBER: US/10/221,662
; CURRENT FILING DATE: 2002-09-16
; PRIOR APPLICATION NUMBER: 09/902,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR FILING DATE: 1999-10-07
; PRIOR APPLICATION NUMBER: 09/149,878
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: 08/993,432
; PRIOR FILING DATE: 1997-12-18
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
SEQ ID NO: 5
LENGTH: 10
TYPE: PRT
ORGANISM: Sheep
FEATURE:
LOCATION: 300..309
OTHER INFORMATION: Polypeptide fragment from fetuin.

Query Match 93.9%; Score 46; DB 4; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.011; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
Db 1 HTFGVAVSE 10

RESULT 10

Sequence 6, Application US/10221662
; Publication No. US2003005046A1
GENERAL INFORMATION:
; APPLICANT: Tsai, David
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; TITLE OF INVENTION: Thereof.

Query Match 93.9%; Score 46; DB 4; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.011; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
Db 1 HTFGVAVSE 10

RESULT 12 US-10-267-706-5
; Sequence 5, Application US/10267706
; Publication No. US20030087809A1
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; TITLE OF INVENTION: Thereof.
; FILE REFERENCE: 2-04-1892.
; CURRENT APPLICATION NUMBER: US/10/267,706
; CURRENT FILING DATE: 2002-10-08
; PRIOR APPLICATION NUMBER: US/10/145,682A
; PRIOR FILING DATE: 2002-08-23
; PRIOR APPLICATION NUMBER: 09/902,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 09/414,136
; PRIOR FILING DATE: 1999-10-07
; PRIOR APPLICATION NUMBER: 09/149,878
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: 08/993,432
; PRIOR FILING DATE: 1997-12-18
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
; SEQ ID NO: 5
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Sheep
; LOCATION: 300..309
; OTHER INFORMATION: Polypeptide fragment from fetuin.
US-10-267-706-5

Query Match 93.9%; Score 46; DB 4; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.01%; Indels 0; Gaps 0;
Matches 9; Conservative 1; Mismatches 0;

Qy 1 HSFGVAVSE 10
Db :||||||| 1 HTFGVAVSE 10

RESULT 13 US-10-267-706-6
; Sequence 6, Application US/10267706
; Publication No. US20030087809A1
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; TITLE OF INVENTION: Thereof.
; FILE REFERENCE: 2-04-1892.
; CURRENT APPLICATION NUMBER: US/10/267,706
; CURRENT FILING DATE: 2002-10-08
; PRIOR APPLICATION NUMBER: US/10/145,682A
; PRIOR FILING DATE: 2002-08-23
; PRIOR APPLICATION NUMBER: 09/902,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 09/414,136
; PRIOR FILING DATE: 1999-10-07
; PRIOR APPLICATION NUMBER: 09/149,878
; PRIOR FILING DATE: 1998-09-08
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
; SEQ ID NO: 6
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Rat
; LOCATION: 300..309
; OTHER INFORMATION: Polypeptide fragment from fetuin.
US-10-267-706-6

RESULT 14 US-10-772-537-1
; Sequence 1, Application US/10772537
; Publication No. US20040259800A1
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; TITLE OF INVENTION: Thereof.
; FILE REFERENCE: 2-04-1892.
; CURRENT FILING DATE: 2004-02-05
; PRIOR APPLICATION NUMBER: US/10/772,537
; PRIOR FILING DATE: 2003-05-14
; PRIOR APPLICATION NUMBER: 09/902,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 09/414,136
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 09/149,878
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: 08/993,432
; PRIOR FILING DATE: 1997-12-18
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
; SEQ ID NO: 1
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Bovine
; LOCATION: 300..309
; OTHER INFORMATION: Polypeptide fragment from treatment of fetuin from bovine ser
US-10-772-537-1

Query Match 93.9%; Score 46; DB 5; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.01%; Indels 0; Gaps 0;
Matches 9; Conservative 1; Mismatches 0;

Qy 1 HSFGVAVSE 10
Db :||||||| 1 HTFGVAVSE 10

RESULT 15 US-10-772-537-5
; Sequence 5, Application US/10772537
; Publication No. US20040259800A1
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; TITLE OF INVENTION: Thereof.
; FILE REFERENCE: 2-04-1892.
; CURRENT FILING DATE: 2004-02-05
; PRIOR APPLICATION NUMBER: US/10/772,537
; PRIOR FILING DATE: 2003-05-14
; PRIOR APPLICATION NUMBER: 09/902,208
; PRIOR APPLICATION NUMBER: 09/414,136
; PRIOR FILING DATE: 1998-10-07
; PRIOR APPLICATION NUMBER: 09/149,878
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: 08/993,432
; PRIOR FILING DATE: 1997-12-18
; NUMBER OF SEQ ID NOS: 7

```

; SOFTWARE: Microsoft Word 2001.
; SEQ ID NO 5
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Sheep
; LOCATION: 300..309
; OTHER INFORMATION: Polypeptide fragment from fetuin.
US-10-772-537-5

Query Match 93.9%; Score 46; DB 5; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.011;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 HSFSGVAVVE 10
Db 1 HTFSGVAVVE 10

RESULT 16
US-10-772-537-6
; Sequence 6, Application US/10772537
; Publication No. US20040259800A1
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; CURRENT APPLICATION NUMBER: US/10/772,537
; CURRENT FILING DATE: 2004-02-05
; PRIOR APPLICATION NUMBER: 10/145,682
; PRIOR FILING DATE: 2002-05-14
; PRIOR APPLICATION NUMBER: 09/902,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 09/414,136
; PRIOR FILING DATE: 1999-10-07
; PRIOR APPLICATION NUMBER: 09/149,978
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: 08/993,432
; PRIOR FILING DATE: 1997-12-18
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
; SEQ ID NO 6
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Rat
; LOCATION: 300..309
; OTHER INFORMATION: Polypeptide fragment from fetuin.
US-10-772-537-6

Query Match 93.9%; Score 46; DB 5; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.011;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 HSFSGVAVVE 10
Db 1 HTFSGVAVVE 10

RESULT 17
US-10-415-288-7
; Sequence 7, Application US/10415288
; Publication No. US20040128648A1
; GENERAL INFORMATION:
; APPLICANT: GRUNBERGER, George
; APPLICANT: MATTHEWS, Suresh T.
; APPLICANT: KAI LIN, Catherine Jen
; APPLICANT: GOUSTIN, Anton, Scott
; APPLICANT: SRINIVAS, Porchur R.
; TITLE OF INVENTION: INHIBITION OF ALPHA-2 HS GLYCOPROTEIN (AHSG/PETUIN) IN OBESITY AND INSULIN CONTROL OF GLUCOSE HOMEOSTASIS
; FILE REFERENCE: 38368-18769
; CURRENT FILING DATE: 2003-04-15, 288
; PRIOR APPLICATION NUMBER: US/10/415,288

Query Match 93.9%; Score 46; DB 5; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.011;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 HSFSGVAVVE 10
Db 1 HTFSGVAVVE 10

RESULT 18
US-10-145-682A-7
; Sequence 7, Application US/10145682A
; Publication No. US2003027767A1
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; FILE REFERENCE: 2-04-1892
; CURRENT APPLICATION NUMBER: US/10/145,682A
; CURRENT FILING DATE: 2002-08-23
; PRIOR APPLICATION NUMBER: 09/902,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 09/414,136
; PRIOR FILING DATE: 1999-10-07
; PRIOR APPLICATION NUMBER: 09/149,878
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: 08/993,432
; PRIOR FILING DATE: 1997-12-18
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
; SEQ ID NO 7
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Mouse
; LOCATION: 300..309
; OTHER INFORMATION: Polypeptide fragment from fetuin.
US-10-145-682A-7

Query Match 77.6%; Score 38; DB 4; Length 10;
Best Local Similarity 80.0%; Pred. No. 0.52;
Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Qy 1 HSFSGVAVVE 10
Db 1 HAFSGVAVVE 10

RESULT 19
US-10-221-662-7
; Sequence 7, Application US/10221662
; Publication No. US2003005046A1
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; FILE REFERENCE: 2-04-1892
; CURRENT APPLICATION NUMBER: US/10/221,662
; CURRENT FILING DATE: 2002-09-16
; PRIOR APPLICATION NUMBER: 09/902,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 09/414,136

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; PRIOR FILING DATE: 1999-10-07 ; TITLE OF INVENTION: Thereof.
; PRIOR APPLICATION NUMBER: 09/149,878 ; FILE REFERENCE: 2-04-1892
; PRIOR FILING DATE: 1998-09-08 ; CURRENT APPLICATION NUMBER: US/10/772,537
; PRIOR APPLICATION NUMBER: 08/953,432 ; CURRENT FILING DATE: 2004-02-05
; PRIOR FILING DATE: 1997-12-18 ; PRIOR APPLICATION NUMBER: 10/145,682
; NUMBER OF SEQ ID NOS: 7 ; PRIOR FILING DATE: 2002-05-14
; SOFTWARE: Microsoft Word 2001. ; PRIOR APPLICATION NUMBER: 09/902,208
; SEQ ID NO: 7 ; PRIOR FILING DATE: 2001-07-09
; LENGTH: 10 ; PRIOR APPLICATION NUMBER: 09/414,136
; TYPE: PRT ; PRIOR FILING DATE: 1999-10-07
; ORGANISM: Mouse ; PRIOR APPLICATION NUMBER: 09/149,878
; FEATURE: ; PRIOR FILING DATE: 1998-09-08
; LOCATION: 300...309 ; PRIOR APPLICATION NUMBER: 08/993,432
; OTHER INFORMATION: Polypeptide fragment from fetuin. ; PRIOR FILING DATE: 1997-12-18
US-10-221-662-7 ; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
; SEQ ID NO: 7 ; SOFTWARE: Microsoft Word 2001.
; LENGTH: 10 ; LENGTH: 10
; OTHER INFORMATION: Polypeptide fragment from fetuin.
US-10-772-537-7

Query Match 77.6%; Score 38; DB 4; Length 10;
Best Local Similarity 80.0%; Pred. No. 0.52; Mismatches 1; Indels 0; Gaps 0;
Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 1 :||| ||||| 10
          |:| | | | |
          1 HAFSPVAVSE 10

RESULT 20
US-10-267-706-7
; Sequence 7, Application US/10267706
; Publication No. US20030087809A1
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method
; TITLE OF INVENTION: of Preparation
; TITLE OF INVENTION: Thereof.
; FILE REFERENCE: 2-04-1892
; CURRENT APPLICATION NUMBER: US/10/267,706
; PRIOR FILING DATE: 2002-10-08
; PRIOR APPLICATION NUMBER: US/10/145,682A
; PRIOR FILING DATE: 2002-08-23
; PRIOR APPLICATION NUMBER: 09/902,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 09/414,136
; PRIOR FILING DATE: 1999-10-07
; PRIOR APPLICATION NUMBER: 09/149,878
; PRIOR FILING DATE: 1998-09-08
; PRIOR FILING NUMBER: 08/993,432
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
; SEQ ID NO: 7
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Mouse
; LOCATION: 300...309
; OTHER INFORMATION: Polypeptide fragment from fetuin.
US-10-267-706-7

Query Match 77.6%; Score 38; DB 4; Length 10;
Best Local Similarity 80.0%; Pred. No. 0.52; Mismatches 1; Indels 0; Gaps 0;
Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 1 :||| ||||| 10
          |:| | | | |
          1 HAFSPVAVSE 10

RESULT 21
US-10-772-537-7
; Sequence 7, Application US/10772537
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation

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; TITLE OF INVENTION: Thereof.
; FILE REFERENCE: 2-04-1892
; CURRENT APPLICATION NUMBER: US/10/772,537
; PRIOR FILING DATE: 2004-02-05
; PRIOR APPLICATION NUMBER: 10/145,682
; PRIOR FILING DATE: 2002-05-14
; PRIOR APPLICATION NUMBER: 09/902,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 09/414,136
; PRIOR FILING DATE: 1999-10-07
; PRIOR APPLICATION NUMBER: 09/149,878
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: 08/993,432
; PRIOR FILING DATE: 1997-12-18
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
; SEQ ID NO: 7 ; SOFTWARE: Microsoft Word 2001.
; LENGTH: 10 ; LENGTH: 10
; OTHER INFORMATION: Polypeptide fragment from fetuin.
US-10-772-537-7

Query Match 77.6%; Score 38; DB 4; Length 10;
Best Local Similarity 80.0%; Pred. No. 0.52; Mismatches 1; Indels 0; Gaps 0;
Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 1 :||| ||||| 10
          |:| | | | |
          1 HAFSPVAVSE 10

RESULT 22
US-10-415-288-5
; Sequence 5, Application US/10415288
; Publication No. US20040198648A1
; GENERAL INFORMATION:
; APPLICANT: GRUNBERGER, George
; APPLICANT: MATTHEWS, Suresh T.
; APPLICANT: KAI-LIN, Catherine Jen
; APPLICANT: GOUSTIN, Anton, Scott
; APPLICANT: Srinivas, Pothur, R.
; TITLE OF INVENTION: INHIBITION OF ALPHA-2 HS GLYCOPROTEIN (AHSG/FETUIN) FILE REFERENCE: 3868-187769
; CURRENT APPLICATION NUMBER: US/10/415,288
; CURRENT FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: PCT/US01/42832
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: US 60/243,442
; PRIOR FILING DATE: 2000-10-27
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 5
; LENGTH: 346
; TYPE: PRT
; ORGANISM: Murinae gen. sp.
US-10-415-288-5

Query Match 77.6%; Score 38; DB 4; Length 10;
Best Local Similarity 80.0%; Pred. No. 0.27; Mismatches 1; Indels 0; Gaps 0;
Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 1 :||| ||||| 10
          |:| | | | |
          1 HAFSPVAVSE 312

RESULT 23
US-10-316-253-84
; Sequence 84, Application US/10316253
; Publication No. US20030162706A1
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation

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; GENERAL INFORMATION:
; APPLICANT: The Procter & Gamble Company
; APPENDANT: Peters, Kevin
; APPENDANT: Thompson, Larry
; APPENDANT: Wang, Fang
; APPENDANT: Greis, Kenneth
; TITLE OF INVENTION: Angiogenesis Modulating Proteins
; CURRENT APPLICATION NUMBER: US/10/316,253
; FILE REFERENCE: 8865M
; CURRENT FILING DATE: 2002-12-10
; PRIOR APPLICATION NUMBER: US 60/355,295
; PRIOR FILING DATE: 2002-02-08
; NUMBER OF SEQ ID NOS: 308
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 84
; LENGTH: 352
; TYPE: PRT
; ORGANISM: Rattus norvegicus
US-10-316-253-84

Query Match 1 HSFSGVAVSE 10
Best Local Similarity 77.6%; Score 38; DB 4; Length 352;
Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Db 306 HAFSPVAVSE 315

RESULT 24
US-10-316-253-86
; Sequence 86, Application US/10316253
; Publication No. US20030162706A1
; GENERAL INFORMATION:
; APPLICANT: The Procter & Gamble Company
; APPENDANT: Peters, Kevin
; APPENDANT: Thompson, Larry
; APPENDANT: Wang, Fang
; APPENDANT: Greis, Kenneth
; TITLE OF INVENTION: Angiogenesis Modulating Proteins
; FILE REFERENCE: 8865M
; CURRENT APPLICATION NUMBER: US/10/316,253
; CURRENT FILING DATE: 2002-12-10
; PRIOR APPLICATION NUMBER: US 60/355,295
; PRIOR FILING DATE: 2002-02-08
; NUMBER OF SEQ ID NOS: 308
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO: 86
; LENGTH: 352
; TYPE: PRT
; ORGANISM: Rattus norvegicus
US-10-316-253-86

Query Match 1 HSFSGVAVSE 10
Best Local Similarity 80.0%; Score 38; DB 4; Length 352;
Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Db 306 HAFSPVAVSE 315

; TITLE OF INVENTION: IN OBESITY AND INSULIN CONTROL OF GLUCOSE HOMEOSTASIS
; FILE REFERENCE: 303368-187769
; CURRENT APPLICATION NUMBER: US/10/415,288
; CURRENT FILING DATE: 2003-04-28
; PRIOR APPLICATION NUMBER: PCT/US01/42832
; PRIOR FILING DATE: 2001-10-29
; PRIOR APPLICATION NUMBER: US 60/243,442
; PRIOR FILING DATE: 2000-10-27
; NUMBER OF SEQ ID NOS: 7
; SEQ ID NO: 6
; SOFTWARE: PatentIn version 3.1
; LENGTH: 352
; TYPE: PRT
; ORGANISM: Rattus norvegicus
US-10-415-288-6

Query Match 1 HSFSGVAVSE 10
Best Local Similarity 80.0%; Score 38; DB 4; Length 352;
Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
Db 306 HAFSPVAVSE 315

RESULT 26
US-09-009-320-245
; Sequence 245, Application US/09909320
; GENERAL INFORMATION:
; Patent No. US20020132240A1
; APPLICANT: Genentech, Inc.
; APPLICANT: Aszkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Baton, Dan L.
; APPLICANT: Perrara, Napoleone
; APPLICANT: Palvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Olang
; APPLICANT: Gerber, Hans Peter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hallan, Kenneth J.
; APPLICANT: KJavvin, Iver J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Ponzi, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Thomas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; Acid Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/909,320
; CURRENT FILING DATE: 2002-01-04
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/115,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; TITLE OF INVENTION: INHIBITION OF ALPHA-2 HS GLYCOPROTEIN (AHSG/PEIUN)

RESULT 27
 US-09-909-088B-245
 ; Sequence No. 245, Application US/09909088B
 ; Patent No. US20020146709A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napoleone
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillian, Kenneth J.
 ; APPLICANT: Kliajvin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paonii, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William J.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; FILE REFERENCE: 10466-14
 ; CURRENT APPLICATION NUMBER: US/09/909,088B
 ; CURRENT FILING DATE: 2001-07-18
 ; PRIOR APPLICATION NUMBER: FCT/US00/04414

Query Match Score 75.5%; DB 3; Length 713;
 Best Local Similarity 60.0%; Pred. No. 1e+02;
 Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
 Db 135 HSFGAGLSLQ 144

RESULT 28
 US-09-909-088B-245
 ; Sequence No. 245, Application US/09909088B
 ; Patent No. US20020146709A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napoleone
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillian, Kenneth J.
 ; APPLICANT: Kliajvin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paonii, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William J.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; FILE REFERENCE: 10466-14
 ; CURRENT APPLICATION NUMBER: US/09/909,088B
 ; CURRENT FILING DATE: 2001-07-18
 ; PRIOR APPLICATION NUMBER: FCT/US00/04414

; APPLICANT: Paoni, Nicholas F. ; APPLICANT: Pong, Sherman
 ; APPLICANT: Roy, Margaret Ann ; APPLICANT: Gao, Wei-Oiang
 ; APPLICANT: Stewart, Timothy A. ; APPLICANT: Gerber, Hans Peter
 ; APPLICANT: Tumas, Daniel ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Williams, P. Mickey ; APPLICANT: Goddard, A.
 ; APPLICANT: Wood, William J. ; APPLICANT: Paul J.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; ACIDS Encoding the Same
 ; FILE REFERENCE: 10466-14
 ; CURRENT APPLICATION NUMBER: US/09/905.291A
 ; CURRENT FILING DATE: 2001-07-12
 ; PRIOR APPLICATION NUMBER: PCT/US00/04414
 ; PRIOR FILING DATE: 2000-02-22
 ; PRIOR APPLICATION NUMBER: US 60/143,048
 ; PRIOR FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: US 60/145,698
 ; PRIOR FILING DATE: 1999-07-26
 ; PRIOR APPLICATION NUMBER: US 60/146,222
 ; PRIOR FILING DATE: 1999-07-28
 ; PRIOR APPLICATION NUMBER: PCT/US99/20594
 ; PRIOR FILING DATE: 1999-09-08
 ; PRIOR APPLICATION NUMBER: PCT/US99/20944
 ; PRIOR FILING DATE: 1999-09-13
 ; PRIOR APPLICATION NUMBER: PCT/US99/21090
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/21547
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/23069
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ; PRIOR FILING DATE: 1999-11-29
 ; PRIOR APPLICATION NUMBER: PCT/US99/28313
 ; PRIOR FILING DATE: 1999-11-30
 ; PRIOR APPLICATION NUMBER: PCT/US99/28564
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/28565
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/30095
 ; PRIOR FILING DATE: 1999-12-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/30911
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US99/30999
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US00/00219
 ; PRIOR FILING DATE: 2000-01-05
 ; NUMBER OF SEQ ID NOS: 423
 ; SEQ ID NO: 245
 ; LENGTH: 713
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 US-09-905-291A-245

Query Match 75.5% ; Score 37; DB 3; Length 713;
 Best Local Similarity 60.0%; Prod. No. 1e-02; Mismatches 0; Indels 0; Gaps 0;

Qy 1 ||||:|||:|||:
 Db 135 HSFAGLQLQ 144

RESULT 29
 US-09-902-853-245
 Sequence 245, Application US/09902853
 Publication No. US20020192659A1
 GENERAL INFORMATION:
 APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Borstean, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napoleone
 ; APPLICANT: Filvaroff, Ellen

; APPLICANT: Gao, Wei-Oiang
 ; APPLICANT: Gerber, Hans Peter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillian, Kenneth J.
 ; APPLICANT: Kjavin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William J.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; ACIDS Encoding the Same
 ; FILE REFERENCE: 10466-14
 ; CURRENT APPLICATION NUMBER: US/09/902,853
 ; CURRENT FILING DATE: 2001-07-10
 ; PRIOR APPLICATION NUMBER: US/09/665,350
 ; PRIOR FILING DATE: 2000-09-18
 ; PRIOR APPLICATION NUMBER: US 60/143,048
 ; PRIOR FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: US 60/145,698
 ; PRIOR FILING DATE: 1999-07-26
 ; PRIOR APPLICATION NUMBER: US 60/146,222
 ; PRIOR FILING DATE: 1999-07-28
 ; PRIOR APPLICATION NUMBER: PCT/US99/20594
 ; PRIOR FILING DATE: 1999-09-08
 ; PRIOR APPLICATION NUMBER: PCT/US99/20944
 ; PRIOR FILING DATE: 1999-09-13
 ; PRIOR APPLICATION NUMBER: PCT/US99/21090
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/21547
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/23069
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ; PRIOR FILING DATE: 1999-11-29
 ; PRIOR APPLICATION NUMBER: PCT/US99/28313
 ; PRIOR FILING DATE: 1999-11-30
 ; PRIOR APPLICATION NUMBER: PCT/US99/28564
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/28565
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/30095
 ; PRIOR FILING DATE: 1999-12-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/30911
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US99/30999
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US00/00219
 ; PRIOR FILING DATE: 2000-01-05
 ; NUMBER OF SEQ ID NOS: 423
 ; SEQ ID NO: 245
 ; LENGTH: 713
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 US-09-902-853-245

Query Match 75.5% ; Score 37; DB 3; Length 713;
 Best Local Similarity 60.0%; Prod. No. 1e+02; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HSFAGLQLQ 10
 Db 135 HSFAGLQLQ 144

RESULT 30
 US-09-907-824-245
 ; Sequence 245, Application US/09907824
 ; GENERAL INFORMATION:
 ; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napoleone
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillan, Kenneth, J.
 ; APPLICANT: Klagsbrun, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tunas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William, I.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; ACIDS Encoding the Same
 ; FILE REFERENCE: 10466-14
 ; CURRENT APPLICATION NUMBER: US/09/907,824
 ; CURRENT FILING DATE: 2001-07-17
 ; PRIOR APPLICATION NUMBER: 09/655,350
 ; PRIOR FILING DATE: 2000-09-18
 ; PRIOR APPLICATION NUMBER: PCT/US00/04414
 ; PRIOR FILING DATE: 2000-02-22
 ; PRIOR APPLICATION NUMBER: US 60/143,048
 ; PRIOR FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: US 60/145,698
 ; PRIOR FILING DATE: 1999-07-26
 ; PRIOR APPLICATION NUMBER: US 60/146,222
 ; PRIOR FILING DATE: 1999-07-28
 ; PRIOR APPLICATION NUMBER: PCT/US99/20594
 ; PRIOR FILING DATE: 1999-09-08
 ; PRIOR APPLICATION NUMBER: PCT/US99/20944
 ; PRIOR FILING DATE: 1999-09-13
 ; PRIOR APPLICATION NUMBER: PCT/US99/21090
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/21547
 ; PRIOR FILING DATE: 1999-11-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/23089
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ; PRIOR FILING DATE: 1999-11-29
 ; PRIOR APPLICATION NUMBER: PCT/US99/28313
 ; PRIOR FILING DATE: 1999-11-30
 ; PRIOR APPLICATION NUMBER: PCT/US99/28564
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/28565
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/30095
 ; PRIOR FILING DATE: 1999-12-16
 ; PRIOR APPLICATION NUMBER: PCT/US99/30911
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US99/30999
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US00/00219
 ; PRIOR FILING DATE: 2000-01-05
 ; SEQ ID NO 245
 ; LENGTH: 713
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 US-09-907-824-245
 Query Match 75.5%; Score 37; DB 3; Length 713;
 Best Local Similarity 60.0%; Pred. No. 1e+02;
 Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 HSFSGVAVSE 10
 Db 135 HSPAGLALSQ 144

RESULT 31
 US-09-907-841-245
 ; Sequence 245, Application US/09907841
 ; Publication No. US20020198366A1
 ; GENERAL INFORMATION:
 ; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David
 ; APPLICANT: Destroyer, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napoleone
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Pong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Goodwski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillan, Kenneth, J.
 ; APPLICANT: Klagsbrun, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tunas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William, I.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; ACIDS Encoding the Same
 ; FILE REFERENCE: 10466-14
 ; CURRENT APPLICATION NUMBER: US/09/907,841
 ; CURRENT FILING DATE: 2001-11-20
 ; PRIOR APPLICATION NUMBER: PCT/US00/04414
 ; PRIOR FILING DATE: 2000-02-22
 ; PRIOR APPLICATION NUMBER: US 60/143,048
 ; PRIOR FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: US 60/145,698
 ; PRIOR FILING DATE: 1999-07-26
 ; PRIOR APPLICATION NUMBER: US 60/146,222
 ; PRIOR FILING DATE: 1999-07-28
 ; PRIOR APPLICATION NUMBER: PCT/US99/20594
 ; PRIOR FILING DATE: 1999-09-08
 ; PRIOR APPLICATION NUMBER: PCT/US99/20944
 ; PRIOR FILING DATE: 1999-09-13
 ; PRIOR APPLICATION NUMBER: PCT/US99/21090
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/21547
 ; PRIOR FILING DATE: 1999-11-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/23089
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ; PRIOR FILING DATE: 1999-11-29
 ; PRIOR APPLICATION NUMBER: PCT/US99/28313
 ; PRIOR FILING DATE: 1999-11-30
 ; PRIOR APPLICATION NUMBER: PCT/US99/28564
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/28565
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/30095
 ; PRIOR FILING DATE: 1999-12-16
 ; PRIOR APPLICATION NUMBER: PCT/US99/30911
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US99/30999
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US00/00219
 ; PRIOR FILING DATE: 2000-01-05
 ; SEQ ID NO 245
 ; LENGTH: 713
 ; Remaining Prior Application data removed - See File Wrapper or PALM.
 ; NUMBER OF SEQ ID NOS: 423
 ; SEQ ID NO 245
 ; LENGTH: 713

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TYPE: PRT          ; PRIOR FILING DATE: 1999-12-02
ORGANISM: Homo Sapien ; PRIOR APPLICATION NUMBER: PCT/US99/28565
S-09-907-841-245 ; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
Query Match       ; PRIOR FILING DATE: 1999-12-16
Best Local Similarity    ; PRIOR APPLICATION NUMBER: PCT/US99/30911
Matches          ; PRIOR FILING DATE: 1999-12-20
6; Conservative   ; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 245
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-011-245

RESULT 32
Sequence 245, Application US/09904011
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Destroyer, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Autin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kliavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tunas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/904,011
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: 09/665,350
PRIOR FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143, 048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145, 698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146, 222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/23214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/26313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564

RESULT 32
Sequence 245, Application US/09904011
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Destroyer, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Autin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kliavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tunas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/904,011
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: 09/665,350
PRIOR FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143, 048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
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PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/23214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/26313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564

RESULT 32
Sequence 245, Application US/09904011
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Destroyer, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Autin L.
APPLICANT: Hillan, Kenneth, J.
APPLICANT: Kliavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas F.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tunas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/904,011
CURRENT FILING DATE: 2001-07-11
PRIOR APPLICATION NUMBER: 09/665,350
PRIOR FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143, 048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/23214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/26313
PRIOR FILING DATE: 1999-11-30
PRIOR APPLICATION NUMBER: PCT/US99/28564

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Matches 6 ; Conservative 4 ; Mismatches 0 ; Indels 0 ; Gaps 0 ;
 Qy 1 HSFSGVAVSE 10
 Db 135 HSPAGLQLQ 144

RESULT 34
 US-09-908-093-245
 Sequence 245, Application US/09908093
 Publication No. US2003001749BA1
 GENERAL INFORMATION:
 APPLICANT: Genentech, Inc.
 APPLICANT: Ashkenazi, Avi
 APPLICANT: Botstein, David
 APPLICANT: Desnoyers, Luc
 APPLICANT: Eaton, Dan L.
 APPLICANT: Ferrara, Napoleone
 APPLICANT: Filvaroff, Ellen
 APPLICANT: Fong, Sherman
 APPLICANT: Gao, Wei-Qiang
 APPLICANT: Gerber, Hanspeter
 APPLICANT: Gerritsen, Mary E.
 APPLICANT: Goddard, A.
 APPLICANT: Godowski, Paul J.
 APPLICANT: Grimaldi, Christopher J.
 APPLICANT: Gurney, Austin L.
 APPLICANT: Hillan, Kenneth, J.
 APPLICANT: Kljavin, Ivar J.
 APPLICANT: Mather, Jennie P.
 APPLICANT: Pan, James
 APPLICANT: Paoni, Nicholas F.
 APPLICANT: Roy, Margaret Ann
 APPLICANT: Stewart, Timothy A.
 APPLICANT: Tumas, Daniel
 APPLICANT: Williams, P. Mickey
 APPLICANT: Wood, William, I.
 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic Acid Encoding the Same
 FILE REFERENCE: 10466-14
 CURRENT FILING DATE: 2001-07-17
 PRIOR APPLICATION NUMBER: 09/665,350
 PRIOR FILING DATE: 2000-09-18
 PRIOR APPLICATION NUMBER: PCT/US00/04414
 PRIOR FILING DATE: 2000-02-22
 PRIOR APPLICATION NUMBER: US 60/143,048
 PRIOR FILING DATE: 1999-07-07
 PRIOR APPLICATION NUMBER: US 60/145,638
 PRIOR FILING DATE: 1999-07-26
 PRIOR APPLICATION NUMBER: US 60/146,222
 PRIOR FILING DATE: 1999-07-28
 PRIOR APPLICATION NUMBER: PCT/US99/20594
 PRIOR FILING DATE: 1999-09-08
 PRIOR APPLICATION NUMBER: PCT/US99/20444
 PRIOR FILING DATE: 1999-09-13
 PRIOR APPLICATION NUMBER: PCT/US99/21090
 PRIOR FILING DATE: 1999-09-15
 PRIOR APPLICATION NUMBER: PCT/US99/21547
 PRIOR FILING DATE: 1999-11-15
 PRIOR APPLICATION NUMBER: PCT/US99/23389
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 PRIOR APPLICATION NUMBER: PCT/US99/28564
 PRIOR FILING DATE: 1999-12-02
 PRIOR APPLICATION NUMBER: PCT/US99/28565
 PRIOR FILING DATE: 1999-12-02
 PRIOR APPLICATION NUMBER: PCT/US99/30095
 PRIOR FILING DATE: 1999-12-16
 PRIOR APPLICATION NUMBER: PCT/US99/30993

RESULT 35
 US-09-908-093-245
 Sequence 245, Application US/09908093
 Publication No. US20030023054A1
 GENERAL INFORMATION:
 APPLICANT: Genentech, Inc.
 APPLICANT: Ashkenazi, Avi
 APPLICANT: Botstein, David
 APPLICANT: Desnoyers, Luc
 APPLICANT: Eaton, Dan L.
 APPLICANT: Ferrara, Napoleone
 APPLICANT: Filvaroff, Ellen
 APPLICANT: Fong, Sherman
 APPLICANT: Gao, Wei-Qiang
 APPLICANT: Gerber, Hanspeter
 APPLICANT: Gerritsen, Mary E.
 APPLICANT: Godowski, Paul J.
 APPLICANT: Grimaldi, Christopher J.
 APPLICANT: Hillan, Kenneth, J.
 APPLICANT: Kljavin, Ivar J.
 APPLICANT: Mather, Jennie P.
 APPLICANT: Pan, James
 APPLICANT: Paoni, Nicholas F.
 APPLICANT: Roy, Margaret Ann
 APPLICANT: Stewart, Timothy A.
 APPLICANT: Tumas, Daniel
 APPLICANT: Williams, P. Mickey
 APPLICANT: Wood, William, I.
 TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic Acid Encoding the Same
 FILE REFERENCE: 10466-14
 CURRENT FILING DATE: 2001-07-17
 PRIOR APPLICATION NUMBER: 09/665,350
 PRIOR FILING DATE: 2000-09-18
 PRIOR APPLICATION NUMBER: PCT/US00/04414
 PRIOR FILING DATE: 2000-02-22
 PRIOR APPLICATION NUMBER: US 60/143,048
 PRIOR FILING DATE: 1999-07-07
 PRIOR APPLICATION NUMBER: US 60/145,638
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 PRIOR APPLICATION NUMBER: US 60/146,222
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 PRIOR APPLICATION NUMBER: PCT/US99/28565
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 PRIOR FILING DATE: 1999-12-16
 PRIOR APPLICATION NUMBER: PCT/US99/21547

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; PRIOR FILING DATE: 1999-03-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28566
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO: 245
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Homo sapien
US-09-906-742-245

Query Match      75 5%; Score 37; DB 3; Length 713;
Best Local Similarity 60.0%; Pred. No. 1e+02;
Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy          1 HSFSGVAVVE 10
           ||| :| :| :|
Ddb          135 HSFAGLASLQ 144

RESULT 36
US-09-906-838-245
; Sequence 245, Application US/09906838
; Publication No. US20030027143A1
; GENERAL INFORMATION:
;   APPLICANT: Genentech, Inc.
;   APPLICANT: Ashkenazi, Avi
;   APPLICANT: Bottstein, David
;   APPLICANT: DeNooyers, Luc
;   APPLICANT: Baton, Dan L.
;   APPLICANT: Ferrara, Napoleone
;   APPLICANT: Filvaroff, Eileen
;   APPLICANT: Fong, Sherman
;   APPLICANT: Gao, Wei-Oiang
;   APPLICANT: Gerber, Hanspeter
;   APPLICANT: Geritsen, Mary E.
;   APPLICANT: Goddard, A.
;   APPLICANT: Grimaldi, Christopher J.
;   APPLICANT: Godowski, Paul J.
;   APPLICANT: Gurney, Austin L.
;   APPLICANT: Hillan, Kenneth, J.
;   APPLICANT: Klijavim, Ivar J.
;   APPLICANT: Mather, Jennie P.
;   APPLICANT: Pan, James
;   APPLICANT: Paoniu, Nicholas F.
;   APPLICANT: Roy, Margaret Ann
;   APPLICANT: Stewart, Timothy A.
;   APPLICANT: Tumez, Daniel
;   APPLICANT: Williams, P. Mickey
;   APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/906,838
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-11
; PRIOR APPLICATION NUMBER: PCT/US00/04414

```

RESULT 38
 US-09-907-942-245
 Query Match 75.5%; Score 37; DB 3; Length 713;
 Best Local Similarity 60.0%; Pred. No. 1e+02; Gaps 0;
 Matches 6; Conservative 4; Mismatches 0; Indels 0;
 ORGANISM: Homo Sapien

Qy 1 HSFSGVAVSE 10
 Db 135 HSPAGLALSQ 144

RESULT 39
 US-09-907-942-245
 Sequence 245, Application US 09907942-245
 Publication No. US20030027146A1
 GENERAL INFORMATION:
 APPLICANT: Genentech, Inc.
 APPLICANT: Ashtekar, Avi
 APPLICANT: Botstein, David
 APPLICANT: Desnoyers, Luc
 APPLICANT: Bator, Dan L.
 APPLICANT: Ferrara, Napoleon
 APPLICANT: Filvaroff, Ellen

Query Match 75.5%; Score 37; DB 3; Length 713;
 Best Local Similarity 60.0%; Pred. No. 1e+02; Gaps 0;
 Matches 6; Conservative 4; Mismatches 0; Indels 0;
 ORGANISM: Homo Sapien

Qy 1 HSFSGVAVSE 10
 Db 135 HSPAGLALSQ 144

RESULT 39
 US-09-904-859-245
 / Sequence 245, Application US/09904859
 / Publication No. US20030036060A1
 GENERAL INFORMATION:
 / APPLICANT: Genentech, Inc.
 / APPLICANT: Ashkenazi, Avi
 / APPLICANT: Botstein, David
 / APPLICANT: Desnoyers, Luc
 / APPLICANT: Eaton, Dan L.
 / APPLICANT: Ferrara, Napoleone
 / APPLICANT: Filvaroff, Ellen
 / APPLICANT: Fong, Sherman
 / APPLICANT: Gao, Wei-Qiang
 / APPLICANT: Gerber, Hanspeter
 / APPLICANT: Gerritsen, Mary E.
 / APPLICANT: Goddard, A.
 / APPLICANT: Godowski, Paul J.
 / APPLICANT: Grimaldi, Christopher J.
 / APPLICANT: Gurney, Austin L.
 / APPLICANT: Hillian, Kenneth J.
 / APPLICANT: Kljaviv, Ivar J.
 / APPLICANT: Mather, Jennie P.
 / APPLICANT: Pan, James
 / APPLICANT: Paoni, Nicholas F.
 / APPLICANT: Roy, Margaret Ann
 / APPLICANT: Stewart, Timothy A.
 / APPLICANT: Tumas, Daniel
 / APPLICANT: Williams, P. Mickey
 / APPLICANT: Wood, William, I.
 / TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 / TITLE OF INVENTION: Aids Encoding the Same
 / FILE REFERENCE: 10466-14
 CURRENT APPLICATION NUMBER: US/09/904,859
 / CURRENT FILING DATE: 2001-07-12
 / PRIOR APPLICATION NUMBER: US/665,350
 / PRIOR FILING DATE: 2000-09-18
 / PRIOR APPLICATION NUMBER: PCT/US00/04414
 / PRIOR FILING DATE: 2000-02-22
 / PRIOR APPLICATION NUMBER: US 60/143,048
 / PRIOR FILING DATE: 1999-07-07
 / PRIOR APPLICATION NUMBER: US 60/145,638
 / PRIOR FILING DATE: 1999-07-26
 / PRIOR APPLICATION NUMBER: US 60/146,222
 / PRIOR FILING DATE: 1999-07-28
 / PRIOR APPLICATION NUMBER: PCT/US99/20594
 / PRIOR FILING DATE: 1999-09-08
 / PRIOR APPLICATION NUMBER: PCT/US99/20544
 / PRIOR FILING DATE: 1999-09-13
 / PRIOR APPLICATION NUMBER: PCT/US99/21090
 / PRIOR FILING DATE: 1999-09-15
 / PRIOR APPLICATION NUMBER: PCT/US99/21547
 / PRIOR FILING DATE: 1999-09-15
 / PRIOR APPLICATION NUMBER: PCT/US99/23089
 / PRIOR FILING DATE: 1999-10-05
 / PRIOR APPLICATION NUMBER: PCT/US99/28565
 / PRIOR FILING DATE: 1999-12-02
 / PRIOR APPLICATION NUMBER: PCT/US99/30095
 / PRIOR FILING DATE: 1999-12-16
 / PRIOR APPLICATION NUMBER: PCT/US99/28564
 / PRIOR FILING DATE: 1999-12-02
 / PRIOR APPLICATION NUMBER: PCT/US99/28565
 / PRIOR FILING DATE: 1999-12-02
 / PRIOR APPLICATION NUMBER: PCT/US99/30991
 / PRIOR FILING DATE: 1999-12-20
 / PRIOR APPLICATION NUMBER: PCT/US99/30999
 / PRIOR FILING DATE: 1999-12-20
 / PRIOR APPLICATION NUMBER: PCT/US00/00219
 / PRIOR FILING DATE: 2000-01-05
 NUMBER OF SEQ ID NOS: 423
 SEQ ID NO: 245

PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; SEQ ID NO: 245
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Homo sapien
; US-09-909-204-245

Query Match Score 37; DB 3; Length 713;
Best Local Similarity 60.0%; Pred. No. 1e+02;
Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy	1 HSFGVAVSE 10 : : : : 135 HSFGGLASLQ 144	Db
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RESULT 41
; Sequence 245, Application US/09904820
; Publication No. US20030036094A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Boteztein, David
; APPLICANT: Deanoyers, Luc
; APPLICANT: Bacon, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Fong, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,820
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08

; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO: 245
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Homo Sapien
; US-09-904-820-245

Query Match Score 37; DB 3; Length 713;
Best Local Similarity 60.0%; Pred. No. 1e+02;
Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy	1 HSFGVAVSE 10 : : : : 135 HSFGGLASLQ 144	Db
----	--	----

RESULT 42
; Sequence 245, Application US/09904786
; Publication No. US20030039969A1
; GENERAL INFORMATION:
; APPLICANT: Gentech, Inc.
; APPLICANT: Ahkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Deanoyers, Luc
; APPLICANT: Baton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritzen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillan, Kenneth, J.
; APPLICANT: Kijavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,820
; PRIOR APPLICATION NUMBER: 09/665,350
; PRIOR FILING DATE: 2000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08

; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; ACIDS Encoding the Same
; FILE REFERENCE: 10466-14

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; CURRENT APPLICATION NUMBER: US/09/904,786
; CURRENT FILING DATE: 2001-07-12
; PRIOR APPLICATION NUMBER: 09/665,350
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO: 245
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-904-786-245

Query Match          75.5%; Score 37; DB 3; Length 713;
Best Local Similarity 60.0%; Pred. No. 1e+02;
Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy      1 HFSFGVAVSE 1.0
Db      135 HSFAGLSQLQ 144

RESULT 43
US-09-906-646-245
Sequence 245, Application US/09906646
Publication No. US20030039971A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillian, Kenneth, J.
APPLICANT: Klijavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas R.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/906,646
CURRENT FILING DATE: 2002-01-22
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/113,048
PRIOR FILING DATE: 1999-09-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05

; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO: 245
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-906-646-245

Query Match          75.5%; Score 37; DB 3; Length 713;
Best Local Similarity 60.0%; Pred. No. 1e+02;
Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy      1 HSPGVASVE 10
Db      135 HSFAGLSQLQ 144

RESULT 44
US-09-906-700-245
Sequence 245, Application US/09906700
Publication No. US20030039972A1
GENERAL INFORMATION:
APPLICANT: Genentech, Inc.
APPLICANT: Ashkenazi, Avi
APPLICANT: Botstein, David
APPLICANT: Desnoyers, Luc
APPLICANT: Eaton, Dan L.
APPLICANT: Ferrara, Napoleone
APPLICANT: Filvaroff, Ellen
APPLICANT: Fong, Sherman
APPLICANT: Gao, Wei-Qiang
APPLICANT: Gerber, Hanspeter
APPLICANT: Gerritsen, Mary E.
APPLICANT: Goddard, A.
APPLICANT: Godowski, Paul J.
APPLICANT: Grimaldi, Christopher J.
APPLICANT: Gurney, Austin L.
APPLICANT: Hillian, Kenneth, J.
APPLICANT: Klijavin, Ivar J.
APPLICANT: Mather, Jennie P.
APPLICANT: Pan, James
APPLICANT: Paoni, Nicholas R.
APPLICANT: Roy, Margaret Ann
APPLICANT: Stewart, Timothy A.
APPLICANT: Tumas, Daniel
APPLICANT: Williams, P. Mickey
APPLICANT: Wood, William, I.
TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/906,700
CURRENT FILING DATE: 2000-09-18
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/113,048
PRIOR FILING DATE: 1999-09-07
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-07-26

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PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/23214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/23313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/23564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/23565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/31911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO: 245
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-905-700-245

Query Match Score 37; DB 3; Length 713;
Best Local Similarity 60.0%; Pred. No. 1e+02;
Matches 6; Conservative 4; Mismatches 0;
Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 135 HSFGAGLSLQ 144

RESULT 45
US-09-903-786-245
; Sequence 245, Application US/09/03788
; Publication No. US20030044793A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Borstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hilian, Kenneth, J.
; APPLICANT: Kjavin, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey

Query Match Score 37; DB 3; Length 713;
Best Local Similarity 60.0%; Pred. No. 1e+02;
Matches 6; Conservative 4; Mismatches 0;
Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 135 HSFGAGLSLQ 144

RESULT 46
US-09-902-903-245
; Sequence 245, Application US/09/02903
; Publication No. US20030044839A1
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Borstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter

; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillian, Kenneth J.
 ; APPLICANT: Kijavin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William J.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; ACIDS Encoding the Same
 ; FILE REFERENCE: 10466-14
 ; CURRENT APPLICATION NUMBER: US/09/902 903
 ; CURRENT FILING DATE: 2001-07-10
 ; PRIOR APPLICATION NUMBER: PCT/US00/04414
 ; PRIOR FILING DATE: 2000-02-22
 ; PRIOR APPLICATION NUMBER: US 60/143,048
 ; PRIOR FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: US 60/145,638
 ; PRIOR FILING DATE: 1999-07-26
 ; PRIOR APPLICATION NUMBER: US 60/146,222
 ; PRIOR FILING DATE: 1999-07-28
 ; PRIOR APPLICATION NUMBER: PCT/US99/20594
 ; PRIOR FILING DATE: 1999-09-08
 ; PRIOR APPLICATION NUMBER: PCT/US99/20344
 ; PRIOR FILING DATE: 1999-09-13
 ; PRIOR APPLICATION NUMBER: PCT/US99/21090
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/21547
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/23089
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ; PRIOR FILING DATE: 1999-11-29
 ; PRIOR APPLICATION NUMBER: PCT/US99/28813
 ; PRIOR FILING DATE: 1999-11-30
 ; PRIOR APPLICATION NUMBER: PCT/US99/28854
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/28865
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/30095
 ; PRIOR FILING DATE: 1999-12-16
 ; PRIOR APPLICATION NUMBER: PCT/US99/30911
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR FILING NUMBER: PCT/US00/00219
 ; PRIOR FILING DATE: 2000-01-05
 ; NUMBER OF SEQ ID NOS: 423
 ; SEQ ID NO: 245
 ; LENGTH: 713
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 ; US-09-902-303-245

Query Match 75.5%; Score 37; DB 3; Length 713;
 Best Local Similarity 60.0%; Pred. No. 1e+02; 0; Gaps 0;
 Matches 6; Conservative 4; Mismatches 0; Indels 0;

Qy 1 HSFGVAVSE 10
 Db 135 HSFGVLSQL 144

RESULT 47
 US-09-903-749A-245
 ; Sequence 245, Application US/09903749A

Query Match 75.5%; Score 37; DB 3; Length 713;
 Best Local Similarity 60.0%; Pred. No. 1e+02;
 Matches 6; Conservative 4; Mismatches 0; Indels 0;
 Gaps 0;

Qy 1 HSFGVAVSE 10
 Db 135 HSFGVAVSE 144

RESULT 48
 US-09-904-119-245
 ; Sequence 245, Application US/0904119
 ; Publication No. US20030049621A1
 ; GENERAL INFORMATION:
 ; APPLICANT: GenenTech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napoleone
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeier
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillan, Kenneth, J.
 ; APPLICANT: Kliavkin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William, I.
 ; TITLE OF INVENTION: Secred and Transmembrane Polypeptides and Nucleic
 ; FILE REFERENCE: 10466-14
 ; CURRENT FILING DATE: 2001-07-11
 ; PRIOR APPLICATION NUMBER: US/09/904,119
 ; PRIOR FILING DATE: 2000-09-18
 ; PRIOR APPLICATION NUMBER: PCT/US00/04414
 ; PRIOR FILING DATE: 2000-02-22
 ; PRIOR APPLICATION NUMBER: US 60/143,048
 ; PRIOR FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: US 60/145,698
 ; PRIOR FILING DATE: 1999-07-26
 ; PRIOR APPLICATION NUMBER: US 60/146,222
 ; PRIOR FILING DATE: 1999-07-28
 ; PRIOR APPLICATION NUMBER: PCT/US99/20594
 ; PRIOR FILING DATE: 1999-09-08
 ; PRIOR APPLICATION NUMBER: PCT/US99/20944
 ; PRIOR FILING DATE: 1999-09-13
 ; PRIOR APPLICATION NUMBER: PCT/US99/21090
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/21547
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/23089
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ; PRIOR FILING DATE: 1999-11-29
 ; PRIOR APPLICATION NUMBER: PCT/US99/28313
 ; PRIOR FILING DATE: 1999-11-30
 ; PRIOR APPLICATION NUMBER: PCT/US99/28564
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/28565
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/30095

RESULT 49
 US-09-904-956-245
 ; Sequence 245, Application US/0904956
 ; Publication No. US20030049622A1
 ; GENERAL INFORMATION:
 ; APPLICANT: GenenTech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napoleone
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Pong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillan, Kenneth, J.
 ; APPLICANT: Kliavkin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Peconi, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Seewert, Timothy A.
 ; APPLICANT: Thomas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William, I.
 ; TITLE OF INVENTION: Secred and Transmembrane Polypeptides and Nucleic
 ; FILE REFERENCE: 10466-14
 ; CURRENT FILING DATE: 2001-07-12
 ; PRIOR APPLICATION NUMBER: PCT/US00/04414
 ; PRIOR FILING DATE: 2000-02-22
 ; PRIOR APPLICATION NUMBER: US 60/143,048
 ; PRIOR FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: US 60/145,698
 ; PRIOR FILING DATE: 1999-07-26
 ; PRIOR APPLICATION NUMBER: PCT/US99/21090
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/21547
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/23089
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ; PRIOR FILING DATE: 1999-11-29
 ; PRIOR APPLICATION NUMBER: PCT/US99/28313
 ; PRIOR FILING DATE: 1999-11-30
 ; PRIOR APPLICATION NUMBER: PCT/US99/28564
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/28565
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/30095

; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/23089
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ; PRIOR FILING DATE: 1999-11-29
 ; PRIOR APPLICATION NUMBER: PCT/US99/28313
 ; PRIOR FILING DATE: 1999-11-30
 ; PRIOR APPLICATION NUMBER: PCT/US99/28564
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/28565
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/30095
 ; PRIOR FILING DATE: 1999-12-16
 ; PRIOR APPLICATION NUMBER: PCT/US99/30911
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US99/30993
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US00/00219
 ; PRIOR FILING DATE: 2000-01-05
 ; NUMBER OF SEQ ID NOS: 423
 ; SEQ ID NO: 245
 ; LENGTH: 713
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 US-09-904-956-245

Query Match 75.5%; Score 37; DB 3; Length 713;
 Best Local Similarity 60.0%; Prod. No. 1e+02; 0; Gaps 0;
 Matches 6; Conservative 4; Mismatches 0; Indels 0;

Qy 1 HSFSGVAVSE 10
 Db 135 HSPAGLSQLQ 144

RESULT 50
 US-09-902-736-245
 ; Sequence 245, Application US/09902736
 ; Publication No. US20030049676A1

GENERAL INFORMATION:
 ; APPLICANT: Gentech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David
 ; APPLICANT: Destroyers, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napoleon
 ; APPLICANT: Filvaroff, Ellen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary B.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillian, Kenneth J.
 ; APPLICANT: Kljavin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William, I.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; TITLE OF INVENTION: Acids Encoding the Same
 ; CURRENT APPLICATION NUMBER: US/09/902736
 ; FILE REFERENCE: 10466-14
 ; CURRENT FILING DATE: 2001-07-10
 ; PRIOR APPLICATION NUMBER: 09/665,350
 ; PRIOR FILING DATE: 2000-09-18
 ; PRIOR APPLICATION NUMBER: PCT/US00/04414

Query Match 75.5%; Score 37; DB 3; Length 713;
 Best Local Similarity 60.0%; Prod. No. 1e+02; 0; Gaps 0;
 Matches 6; Conservative 4; Mismatches 0; Indels 0;

Qy 1 HSFSGVAVSE 10
 Db 135 HSPAGLSQLQ 144

Search completed: April 5, 2006, 17:58:14
 Job time : 167 secs

GenCore version 5.1.7
(c) 1993 - 2006 Biocceleration Ltd.

OM protein - protein search, using SW model

Run on: April 5, 2006, 17:43:24 ; Search time 47 Seconds

(without alignments)
17.591 Million cell updates/sec

Title: US-10-772-537-4

Perfect score: 49

Sequence: 1 HSFSGVASVB 10

Scoring table: BL05IM62

Gapop 10.0 , Gapext 0.5

Searched: 572060 seqs, 82675679 residues

Total number of hits satisfying chosen parameters:

572060

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%

Listing first 100 summaries

Database : Issued_Patents_AA:
1: /cgn2_6/podata/1/iaa/5 COMB .pep: *
2: /cgn2_6/podata/1/iaa/6 _COMB .pep: *
3: /cgn2_6/podata/1/iaa/R COMB .pep: *
4: /cgn2_6/podata/1/iaa/PCUTS COMB .pep: *
5: /cgn2_6/podata/1/iaa/RE COMB .pep: *
6: /cgn2_6/podata/1/iaa/backfile1.pep: *

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the total score distribution, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match	Length	DB	ID	Description
1	49	100.0	10	2	US-10-145-682A-4	Sequence 4, Appli	
2	49	100.0	361	1	US-08-183-926A-9	Sequence 9, Appli	
3	49	100.0	362	1	US-08-137-045-13	Sequence 13, Appli	
4	46	93.9	10	2	US-10-145-682A-1	Sequence 1, Appli	
5	46	93.9	10	2	US-10-145-682A-5	Sequence 5, Appli	
6	46	93.9	10	2	US-10-145-682A-6	Sequence 6, Appli	
7	46	93.9	359	1	US-08-183-926A-8	Sequence 8, Appli	
8	46	93.9	359	1	US-08-137-045-11	Sequence 11, Appli	
9	46	93.9	359	2	US-08-132-071B-1	Sequence 1, Appli	
10	46	93.9	359	2	US-08-147-919A-2	Sequence 1, Appli	
11	46	93.9	359	2	US-08-180-311A-1	Sequence 1, Appli	
12	46	93.9	364	1	US-08-183-926A-10	Sequence 10, Appli	
13	46	93.9	364	1	US-08-137-045-10	Sequence 10, Appli	
14	38	77.6	10	2	US-10-145-682A-7	Sequence 7, Appli	
15	38	77.6	352	1	US-08-183-926A-11	Sequence 11, Appli	
16	38	77.6	352	1	US-08-137-045-12	Sequence 1, Appli	
17	37	75.5	713	2	US-09-907-194A-245	Sequence 245, Appli	
18	37	75.5	713	2	US-09-905-125A-245	Sequence 245, Appli	
19	37	75.5	713	2	US-09-902-175A-245	Sequence 245, Appli	
20	37	75.5	713	2	US-09-906-100-245	Sequence 7, Appli	
21	37	75.5	713	2	US-09-903-245	Sequence 245, Appli	
22	37	75.5	713	2	US-09-904-920A-245	Sequence 245, Appli	
23	37	75.5	713	2	US-09-906-245	Sequence 245, Appli	
24	37	75.5	713	2	US-09-905-181A-245	Sequence 245, Appli	
25	37	75.5	713	2	US-09-906-618-245	Sequence 245, Appli	
26	37	75.5	713	2	US-09-906-146-245	Sequence 245, Appli	
27	37	75.5	713	2	US-09-904-462-245	Sequence 245, Appli	

28	75.5	713	2	US-09-902-736A-245	Sequence 245, Appli
29	75.5	857	2	US-09-906-722A-245	Sequence 997, Appli
30	37	356	73.5	US-09-252-991A-21097	Sequence 21097, Appli
31	37	356	71.4	US-09-248-798A-15329	Sequence 15329, Appli
32	34	69.4	724	US-09-701-866-11	Sequence 11, Appli
33	34	69.4	838	US-09-701-866-10	Sequence 10, Appli
34	35	67.3	233	US-09-232-991A-21116	Sequence 21116, Appli
35	36	67.3	331	US-08-307-674-1	Sequence 1, Appli
36	37	67.3	331	US-09-215-087-1	Sequence 1, Appli
37	38	67.3	331	US-09-391-952-1	Sequence 4, Appli
38	39	67.3	6239	US-09-314-286-4	Sequence 4, Appli
39	40	65.3	205	US-09-248-798A-21389	Sequence 21389, Appli
40	41	65.3	263	US-09-489-019A-10735	Sequence 10735, Appli
41	42	65.3	434	US-09-857-612A-8	Sequence 8, Appli
42	43	65.3	439	US-09-857-612A-12	Sequence 9, Appli
43	44	65.3	1089	US-09-949-016-9707	Sequence 9, Appli
44	45	65.3	462	US-08-801-144-9	Sequence 10, Appli
45	46	65.3	462	US-09-491-599-9	Sequence 11, Appli
46	47	65.3	463	US-09-489-039A-13942	Sequence 12, Appli
47	48	65.3	468	US-09-543-581A-4671	Sequence 13, Appli
48	49	65.3	835	US-09-701-866-8	Sequence 14, Appli
49	50	65.3	838	US-08-996-944-19	Sequence 15, Appli
50	51	65.3	1089	US-09-949-016-9707	Sequence 16, Appli
51	52	63.3	25	US-08-484-296-31	Sequence 17, Appli
52	53	63.3	25	US-08-478-572-31	Sequence 18, Appli
53	54	63.3	25	US-08-478-572-31	Sequence 19, Appli
54	55	63.3	29	US-08-482-142-11	Sequence 20, Appli
55	56	63.3	29	US-08-482-142-29	Sequence 21, Appli
56	57	63.3	29	US-08-482-142-74	Sequence 22, Appli
57	58	63.3	29	US-08-482-142-74	Sequence 23, Appli
58	59	63.3	29	US-08-482-142-92	Sequence 24, Appli
59	60	63.3	29	US-08-482-142-92	Sequence 25, Appli
60	61	63.3	29	US-08-478-572-29	Sequence 26, Appli
61	62	63.3	29	US-08-478-572-74	Sequence 27, Appli
62	63	63.3	29	US-08-484-296-11	Sequence 28, Appli
63	64	63.3	29	US-08-478-572-92	Sequence 29, Appli
64	65	63.3	29	US-08-478-572-92	Sequence 30, Appli
65	66	63.3	29	US-08-484-296-74	Sequence 31, Appli
66	67	63.3	29	US-08-484-296-92	Sequence 32, Appli
67	68	63.3	104	PCT-US95-0448-3	Sequence 33, Appli
68	69	63.3	149	US-09-252-991A-18591	Sequence 18591, Appli
69	70	63.3	156	US-09-270-767-32987	Sequence 34987, Appli
70	71	63.3	222	US-08-945-288-11	Sequence 92, Appli
71	72	63.3	222	US-08-462-831-11	Sequence 11, Appli
72	73	63.3	222	US-08-462-831-11	Sequence 11, Appli
73	74	63.3	222	US-08-461-441-11	Sequence 11, Appli
74	75	63.3	222	US-08-461-441-11	Sequence 11, Appli
75	76	63.3	222	US-09-543-61A-6751	Sequence 6751, Appli
76	77	63.3	222	PCT-US93-08518-11	Sequence 22910, Appli
77	78	63.3	230	US-09-248-796A-22910	Sequence 22910, Appli
78	79	63.3	245	US-09-945-288-2	Sequence 2, Appli
79	80	63.3	245	US-08-462-831-2	Sequence 2, Appli
80	81	63.3	245	US-08-461-809-2	Sequence 2, Appli
81	82	63.3	245	US-08-461-441-2	Sequence 2, Appli
82	83	63.3	245	US-08-461-441-2	Sequence 2, Appli
83	84	63.3	245	US-08-482-142-2	Sequence 2, Appli
84	85	63.3	245	US-08-460-040-2	Sequence 10, Appli
85	86	63.3	245	US-08-462-831-2	Sequence 10, Appli
86	87	63.3	245	US-08-461-441-11	Sequence 10, Appli
87	88	63.3	245	US-08-461-831-2	Sequence 10, Appli
88	89	63.3	320	US-07-945-288-10	Sequence 10, Appli
89	90	63.3	320	US-08-462-831-10	Sequence 10, Appli
90	91	63.3	320	US-08-461-441-10	Sequence 10, Appli
91	92	63.3	320	PCT-US93-08518-10	Sequence 6, Appli
92	93	63.3	321	US-07-945-288-6	Sequence 6, Appli
93	94	63.3	321	US-08-462-831-6	Sequence 6, Appli
94	95	63.3	321	US-08-461-809-6	Sequence 6, Appli
95	96	63.3	321	US-08-461-441-6	Sequence 6, Appli
96	97	63.3	321	US-08-482-142-6	Sequence 6, Appli
97	98	63.3	321	US-08-478-572-6	Sequence 6, Appli
98	99	63.3	321	US-08-484-296-6	Sequence 6, Appli
99	100	63.3	321	PCT-US93-08518-6	Sequence 6, Appli

ALIGNMENTS

RESULT 1
US-10-145-682A-4
; Sequence 4, Application US/10145682A
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; TITLE OF INVENTION: Thereof.
; FILE REFERENCE: 2-04-1892
; CURRENT APPLICATION NUMBER: US/10/145,682A
; CURRENT FILING DATE: 2002-08-23
; PRIOR APPLICATION NUMBER: 08/9902,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 09/414,136
; PRIOR FILING DATE: 1999-10-07
; PRIOR APPLICATION NUMBER: 09/149,878
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: 08/993,432
; PRIOR FILING DATE: 1997-12-18
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
; SEQ ID NO: 4
; LENGTH: 10
; TYPE: PRT
; ORGANISM: PIG
; LOCATION: 300..309
; OTHER INFORMATION: Polypeptide fragment from fetuin.

Query Match Score 49; DB 2; Length 10;
Best Local Similarity 100.0%; Pred. No. 0.0004;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

US-10-145-682A-4

Qy 1 HSFSGVAVSE 10
Db 310 HSFSGVAVSE 319

RESULT 2
US-08-483-926A-9
; Sequence 9, Application US/08483926A
; GENERAL INFORMATION:
; APPLICANT: Dennis, James W.
; TITLE OF INVENTION: MODULATORS OF CYTOKINES OF THE TGF BETA SUPERFAMILY AND METHODS FOR ASSAYING FOR SAME
; NUMBER OF SEQUENCES: 13
; ADDRESSEE: BERESKIN & PARR
; STREET: 40 King Street West
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5H 3Y2

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: Patentin Release #1.0, Version #1.30
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/483,926A
FILING DATE: 07-JUN-1995
CLASSIFICATION: 514
ATTORNEY/AGENT INFORMATION:
NAME: Kurdydyk, Linda M.
REGISTRATION NUMBER: 34,971
REFERENCE/DOCKET NUMBER: 31553-155
TELECOMMUNICATION INFORMATION:

Query Match Score 49; DB 1; Length 362;
Best Local Similarity 100.0%; Pred. No. 0.051;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

US-08-483-926A-9

Qy 1 HSFSGVAVSE 10
Db 311 HSFSGVAVSE 320

RESULT 3
US-08-737-045-13
; Sequence 13, Application US/08737045A
; GENERAL INFORMATION:
; APPLICANT: Dennis, James W.
; APPLICANT: Denetriou, Michael
; APPLICANT: Mount Sinai Hospital Corporation
; TITLE OF INVENTION: COMPOSITIONS COMPRISING MODULATORS OF CYTOKINES OF THE TGF BETA SUPERFAMILY AND A METHOD OF TREATMENT WITH SUCH A
; TITLE OF INVENTION: COMPOSITION (AS AMENDED)
; FILE REFERENCE: 7933..94USWO
; CURRENT APPLICATION NUMBER: US/08/737,045A
; CURRENT FILING DATE: 1997-03-20
; NUMBER OF SEQ ID NOS: 14
; SEQ ID NO: 13
; LENGTH: 362
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism: Pig

Query Match Score 49; DB 1; Length 362;
Best Local Similarity 100.0%; Pred. No. 0.051;
Matches 10; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

US-08-737-045-13

Qy 1 HSFSGVAVSE 10
Db 311 HSFSGVAVSE 320

RESULT 4
US-10-145-682A-1
; Sequence 1, Application US/10145682A
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; FILE REFERENCE: 2-04-1892
; CURRENT APPLICATION NUMBER: US/10/145,682A
; CURRENT FILING DATE: 2002-08-23
; PRIOR APPLICATION NUMBER: 09/902,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 09/414,136
; PRIOR FILING DATE: 1999-10-07
; PRIOR APPLICATION NUMBER: 09/149,878
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: 08/993,432

PRIOR FILING DATE: 1997-12-18
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
; SEQ ID NO 1
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Bovine
; LOCATION: 300 309
; OTHER INFORMATION: Polypeptide fragment from treatment of fetuin from bovine sera as
; OTHER INFORMATION: Described in the specification.
; OTHER INFORMATION: Polypeptide fragment from treatment of fetuin from bovine sera as
; OTHER INFORMATION: Described in the specification.

Query Match 93.9%; Score 46; DB 2; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.0039;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVAV 10
Db 1 HTFSGVAV 10

RESULT 5
US-10-145-682A-5
; Sequence 5, Application US/10145682A
; Patent No. 6720311
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; TITLE OF INVENTION: Thereof.
; FILE REFERENCE: 2-04-1892
; CURRENT APPLICATION NUMBER: US/10/145,682A
; CURRENT FILING DATE: 2002-08-23
; PRIOR APPLICATION NUMBER: 09/905,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 09/414,136
; PRIOR FILING DATE: 1999-10-07
; PRIOR APPLICATION NUMBER: 09/149,878
; PRIOR FILING DATE: 1998-09-08
; PRIOR APPLICATION NUMBER: 08/993,432
; PRIOR FILING DATE: 1997-12-18
; NUMBER OF SEQ ID NOS: 7
; SOFTWARE: Microsoft Word 2001.
; SEQ ID NO 5
; LENGTH: 10
; TYPE: PRT
; ORGANISM: Sheep
; LOCATION: 300 309
; OTHER INFORMATION: Polypeptide fragment from fetuin.

Query Match 93.9%; Score 46; DB 2; Length 10;
Best Local Similarity 90.0%; Pred. No. 0.0039;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVAV 10
Db 1 HTFSGVAV 10

RESULT 6
US-10-145-682A-6
; Sequence 6, Application US/10145682A
; Patent No. 6720311
; GENERAL INFORMATION:
; APPLICANT: Tsai, David.
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Preparation
; TITLE OF INVENTION: Thereof.
; FILE REFERENCE: 2-04-1892
; CURRENT APPLICATION NUMBER: US/10/145,682A
; CURRENT FILING DATE: 2002-08-23
; PRIOR APPLICATION NUMBER: 09/902,208
; PRIOR FILING DATE: 2001-07-09
; PRIOR APPLICATION NUMBER: 09/414,136

RESULT 7
US-08-483-926A-8
; Sequence 8, Application US/08483926A
; Patent No. 581227
; GENERAL INFORMATION:
; APPLICANT: Dennis W.
; TITLE OF INVENTION: MODULATORS OF CYTOKINES OF THE TGF BETA SUPERFAMILY AND METHODS FOR ASSAYING FOR SAME
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BERESIN & PARR
; STREET: 40 king Street West
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5H 3Y2
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC Compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Parent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/483,926A
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kursiduky, Linda M.
; REGISTRATION NUMBER: 34,971
; REFERENCE/DOCKET NUMBER: 3153-155
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 364-7311
; TELEFAX: (416) 361-1398
; INFORMATION FOR SEQ ID NO: 8:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 359 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: Linear
; MOLECULE TYPE: Peptide
; ORIGINAL SOURCE: Bovine
; US-08-483-926A-8

Query Match 93.9%; Score 46; DB 1; Length 359;
Best Local Similarity 90.0%; Pred. No. 0.21;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVAV 10
|:|||||||

Db 313 HTFGVAVVE 322

RESULT 8
US-08-737-045-11
Sequence 11, Application US/08737045A
Patent No. 5984483
GENERAL INFORMATION:
APPLICANT: Dennis, James W.
APPLICANT: Demetrou, Michael
APPLICANT: Mount Sinai Hospital Corporation
TITLE OF INVENTION: COMPOSITIONS COMPRISING MODULATORS OF CYTOKINES OF THE TITLE OF INVENTION: TGF β SUPERFAMILY AND A METHOD OF TREATMENT WITH SUCH A
FILE REFERENCE: 7933.94USW0
CURRENT APPLICATION NUMBER: US/08/737.045A
NUMBER OF SEQ ID NOS: 14
SOFTWARE: PatentIn Ver. 2.0
SEQ ID NO 11
LENGTH: 359
TYPE: PAT
ORGANISM: Unknown
FEATURE:
OTHER INFORMATION: Description of Unknown Organism:Bovine

US-08-737-045-11

Query Match 93.9%; Score 46; DB 1; Length 39;
Best Local Similarity 90.0%; Prd. No. 0.21;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVAVVE 10
Db 313 HTFGVAVVE 322

RESULT 10
US-09-476-919-1
Sequence 1, Application US/09476919
Patent No. 6117837
GENERAL INFORMATION:
APPLICANT: Tracey, Kevin et al.
TITLE OF INVENTION: Prevention of Pregnancy Miscarriages
NUMBER OF SEQUENCES: 2
CORRESPONDENCE ADDRESS:
ADDRESSEE: DAVIS WRIGHT TREMAINE LLP
STREET: 2600 Century Square, 1501 Fourth Avenue
CITY: Seattle
STATE: Washington
COUNTRY: USA
ZIP: 98101-1688
COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: Pentium PC
OPERATING SYSTEM: Windows 95
SOFTWARE: Word
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/476,919
FILING DATE: 18 September 1997
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Oster, Jeffrey B.
REGISTRATION NUMBER: 32,585
REFERENCE/DOCKET NUMBER: 0602
TELECOMMUNICATION INFORMATION:
TELEPHONE: (206) 628-7711
TELEFAX: (206) 628-7699
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 359 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: protein
HYPOTHETICAL: no
SEQUENCE CHARACTERISTICS:
LENGTH: 359 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear

US-09-476-919-1

Query Match 93.9%; Score 46; DB 2; Length 39;
Best Local Similarity 90.0%; Prd. No. 0.21;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVAVVE 10
Db 313 HTFGVAVVE 322

RESULT 11
US-08-780-311A-1

Sequence 1, Application US/08780311A
; Patent No. 6119894
; GENERAL INFORMATION:
; APPLICANT: Tracey, Kevin et al.
; TITLE OF INVENTION: Complexes and Combinations of Retin
; TITLE OF INVENTION: with Therapeutic Agents
; NUMBER OF SEQUENCES: 4
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: DAVIS WRIGHT TREMAINE LLP
; STREET: 2600 Century Square, 1101 Fourth Avenue
; CITY: Seattle
; STATE: Washington
; COUNTRY: USA
; ZIP: 98101-1688
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: Pentium PC
; OPERATING SYSTEM: Windows 95
; SOFTWARE: Word
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/780,311A
; FILING DATE: January 8, 1997
; CLASSIFICATION:
; ATTORNEY/AGENT INFORMATION:
; NAME: Oster, Jeffrey B.
; REGISTRATION NUMBER: 32,585
; REFERENCE/DOCKET NUMBER: 0106
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (206) 628-7711
; TELEFAX: (206) 628-7899
; INFORMATION FOR SEQ ID NO: 1:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 359 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: protein
; HYPOTHETICAL: no
; ANTI-SENSE: no
; FRAGMENT TYPE: N-terminal fragment
; ORIGINAL SOURCE: human
; ORGANISM: human
; US-08-780-311A-1

Query Match 93.9%; Score 46; DB 2; Length 359;
Best Local Similarity 90.0%; Pred. No. 0.21;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
Db 313 HTFGVAVSE 322

RESULT 12
US-08-483-926A-10
; Sequence 10, Application US/08483926A
; GENERAL INFORMATION:
; APPLICANT: Dennis, James W.
; TITLE OF INVENTION: Modulators of Cytokines of the TGF Beta
; TITLE OF INVENTION: Superfamily and Methods for Assaying for SAMM
; NUMBER OF SEQUENCES: 13
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: BERESKIN & PARR
; STREET: 40 King Street West
; CITY: Toronto
; STATE: Ontario
; COUNTRY: Canada
; ZIP: M5H 3Y2
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS

; SOFTWARE: PatentIn Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/483,926A
; FILING DATE: 07-JUN-1995
; CLASSIFICATION: 514
; ATTORNEY/AGENT INFORMATION:
; NAME: Kurydyk, Linda M.
; REGISTRATION NUMBER: 34,971
; REFERENCE/DOCKET NUMBER: 3153-155
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (416) 364-7311
; TELEFAX: (416) 361-1398
; INFORMATION FOR SEQ ID NO: 10:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 364 amino acids
; TYPE: amino acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: peptide
; ORIGINAL SOURCE:
; ORGANISM: Sheep
; US-08-483-926A-10

Query Match 93.9%; Score 46; DB 1; Length 364;
Best Local Similarity 90.0%; Pred. No. 0.21;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
Db 318 HTFGVAVSE 327

RESULT 13
US-08-737-045-10
; Sequence 10, Application US/08737045A
; Patent No. 598483
; GENERAL INFORMATION:
; APPLICANT: Dennis, James W.
; APPLICANT: Demetru, Michael
; APPLICANT: Mount Sinai Hospital Corporation
; TITLE OF INVENTION: Compositions Comprising Modulators of Cytokines of the
; Title of Invention: TGF^{Beta} Superfamily and a Method of Treatment with Such A
; Title of Invention: Composition (AS AMENDED)
; FILE REFERENCE: 793.941SWO
; CURRENT APPLICATION NUMBER: US/08/737,045A
; CURRENT FILING DATE: 1997-03-20
; NUMBER OF SEQ ID NOS: 14
; SEQ ID NO 10
; LENGTH: 364
; TYPE: PRT
; ORGANISM: Unknown
; FEATURE:
; OTHER INFORMATION: Description of Unknown Organism:Sheep
; US-08-737-045-10

Query Match 93.9%; Score 46; DB 1; Length 364;
Best Local Similarity 90.0%; Pred. No. 0.21;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
Db 318 HTFGVAVSE 327

RESULT 14
US-10-145-682A-7
; Sequence 7, Application US/10145682A
; Patent No. 6720311
; GENERAL INFORMATION:
; APPLICANT: Teai, David
; TITLE OF INVENTION: Polypeptide for the Treatment of Cancer and a Method of Prepa:
; TITLE OF INVENTION: Thereof.

TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/907,794A
CURRENT FILING DATE: 2001-07-17
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,698
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,222
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313
PRIOR FILING DATE: 1999-11-10
PRIOR APPLICATION NUMBER: PCT/US99/28564
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/28565
PRIOR FILING DATE: 1999-12-02
PRIOR APPLICATION NUMBER: PCT/US99/30095
PRIOR FILING DATE: 1999-12-16
PRIOR APPLICATION NUMBER: PCT/US99/30911
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30999
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US00/00219
PRIOR FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO: 245
LENGTH: 713
TYPE: PRT
ORGANISM: Homo sapien
US-09-907,794A-245

Query Match 75.5%; Score 37; DB 2; Length 713;
Best Local Similarity 60.0%; Pred. No. 32; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 135 HSFAGGLSQ 144

RESULT 18
US-09-905-125A-245
Sequence 245, Application US/09905125A
; Patent No. 6664376
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Debroyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Eileen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Godard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.

RESULT 19
US-09-905-125A-245
; Sequence 245, Application US/09902775A
; Patent No. 6685651
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Eileen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Godard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.

Query Match 75.5%; Score 37; DB 2; Length 713;
Best Local Similarity 60.0%; Pred. No. 32; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 135 HSFAGGLSQ 144

RESULT 19
US-09-905-125A-245
; Sequence 245, Application US/09902775A
; Patent No. 6685651
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Eileen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Godard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.

Query Match 75.5%; Score 37; DB 2; Length 713;
Best Local Similarity 60.0%; Pred. No. 32; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
Db 135 HSFAGGLSQ 144

RESULT 20

Qy	1	HSEFGVASYE	10
	: : :		
Db	135	HSPAGLASLQ	144

US-09-906-700-245 Sequence 245, Application US/0906700
 Patent No. 672335

GENERAL INFORMATION:

APPLICANT: Genentech, Inc.
 APPLICANT: Askinenzi, Avi
 APPLICANT: Borstein, David
 APPLICANT: Desnoyers, Luc
 APPLICANT: Devoeyers, Luc
 APPLICANT: Ferrara, Dan L.
 APPLICANT: Ferrara, Napoleone
 APPLICANT: Filvaroff, Ellen
 APPLICANT: Goddard, A.
 APPLICANT: Godowski, Paul J.
 APPLICANT: Grimaldi, Christopher J.
 APPLICANT: Gurney, Austin L.
 APPLICANT: Gerber, Hanspeter
 APPLICANT: Gerritsen, Mary E.
 APPLICANT: Hillian, Kenneth J.
 APPLICANT: Klijavin, Ivar J.
 APPLICANT: Mather, Jennie P.
 APPLICANT: Pan, James
 APPLICANT: Paoni, Nicholas F.
 APPLICANT: Roy, Margaret Ann
 APPLICANT: Stewart, Timothy A.
 APPLICANT: Tumas, Daniel
 APPLICANT: Williams, P. Mickey
 APPLICANT: Wood, William I.

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic Acids Encoding the Same

FILE REFERENCE: 10466-14

CURRENT APPLICATION NUMBER: US/09/902,775A

CURRENT FILING DATE: 2001-07-10

PRIOR APPLICATION NUMBER: PCT/US00/04414

PRIOR FILING DATE: 2000-02-22

PRIOR APPLICATION NUMBER: US 60/143,048

PRIOR FILING DATE: 1999-07-07

PRIOR APPLICATION NUMBER: US 60/145,698

PRIOR FILING DATE: 1999-07-26

PRIOR APPLICATION NUMBER: US 60/146,222

PRIOR FILING DATE: 1999-07-28

PRIOR APPLICATION NUMBER: PCT/US99/20594

PRIOR FILING DATE: 1999-09-08

PRIOR APPLICATION NUMBER: PCT/US99/20944

PRIOR FILING DATE: 1999-09-13

PRIOR APPLICATION NUMBER: PCT/US99/21090

PRIOR FILING DATE: 1999-09-15

PRIOR APPLICATION NUMBER: PCT/US99/21547

PRIOR FILING DATE: 1999-09-15

PRIOR APPLICATION NUMBER: PCT/US99/23089

PRIOR FILING DATE: 1999-10-05

PRIOR APPLICATION NUMBER: PCT/US99/28214

PRIOR FILING DATE: 1999-11-29

PRIOR APPLICATION NUMBER: PCT/US99/28313

PRIOR FILING DATE: 1999-11-30

PRIOR APPLICATION NUMBER: PCT/US99/28564

PRIOR FILING DATE: 1999-12-02

PRIOR APPLICATION NUMBER: PCT/US99/28565

PRIOR FILING DATE: 1999-12-02

PRIOR APPLICATION NUMBER: PCT/US99/30095

PRIOR FILING DATE: 1999-12-16

PRIOR APPLICATION NUMBER: PCT/US99/30911

PRIOR FILING DATE: 1999-12-20

PRIOR APPLICATION NUMBER: PCT/US99/30999

PRIOR APPLICATION NUMBER: PCT/US00/00219

PRIOR FILING DATE: 2000-01-05

SEQ ID NO: 245

LENGTH: 713

TYPE: PRT

ORGANISM: Homo Sapien

US-09-902-775A-245

Query Match 75 %; Score 37; DB 2; Length 713;
 Best Local Similarity 60.0%; Pred. No. 32;
 Matches 6; Conservative 4; Mismatches 0;
 Number of SEQ ID Nos: 423
 SEQ ID NO: 245

Gaps 0;

PRIOR FILING DATE: 2000-01-05
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO 245
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-006-700-245

Query Match 75.5%; Score: 37; DB 2; Length: 713;
Best Local Similarity: 60.0%; Pred. No.: 32; Mismatches: 4; Indels: 0; Gaps: 0;
Matches: 6; Conservative: 4; Prior Application Number: PCT/US99/30911
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30911
PROL FILING DATE: 1999-12-16
PROL APPLICATION NUMBER: PCT/US99/30911
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30999
PROL FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US00/00219
PROL FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 245
LENGTH: 713
TYPE: PRT
ORGANISM: Homo Sapien
US-09-003-603A-245

Query Match 75.5%; Score: 37; DB 2; Length: 713;
Best Local Similarity: 60.0%; Pred. No.: 32; Mismatches: 4; Indels: 0; Gaps: 0;
Matches: 6; Conservative: 4; Prior Application Number: PCT/US99/30999
PRIOR FILING DATE: 1999-12-20
PRIOR APPLICATION NUMBER: PCT/US99/30999
PROL FILING DATE: 2000-01-05
NUMBER OF SEQ ID NOS: 423
SEQ ID NO 245
LENGTH: 713
TYPE: PRT
ORGANISM: Homo Sapien
US-09-003-603A-245

RESULT 22
US-09-904-920A-245
Sequence 245, Application US/09904920A
; Patent No. 6767995
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleone
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillian, Kenneth, J.
; APPLICANT: Kliavins, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: GNE_1618P2C12
; CURRENT APPLICATION NUMBER: US/09/903,603A
; CURRENT FILING DATE: 2001-07-11
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,598
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,322
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313

PRIOR FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,598
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,322
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313

CURRENT APPLICATION NUMBER: US/09/904,920A
CURRENT FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,598
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,322
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313

TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
TITLE OF INVENTION: Acids Encoding the Same
FILE REFERENCE: 10466-14
CURRENT APPLICATION NUMBER: US/09/904,920A
CURRENT FILING DATE: 2001-07-13
PRIOR APPLICATION NUMBER: PCT/US00/04414
PRIOR FILING DATE: 2000-02-22
PRIOR APPLICATION NUMBER: US 60/143,048
PRIOR FILING DATE: 1999-07-07
PRIOR APPLICATION NUMBER: US 60/145,598
PRIOR FILING DATE: 1999-07-26
PRIOR APPLICATION NUMBER: US 60/146,322
PRIOR FILING DATE: 1999-07-28
PRIOR APPLICATION NUMBER: PCT/US99/20594
PRIOR FILING DATE: 1999-09-08
PRIOR APPLICATION NUMBER: PCT/US99/20944
PRIOR FILING DATE: 1999-09-13
PRIOR APPLICATION NUMBER: PCT/US99/21090
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/21547
PRIOR FILING DATE: 1999-09-15
PRIOR APPLICATION NUMBER: PCT/US99/23089
PRIOR FILING DATE: 1999-10-05
PRIOR APPLICATION NUMBER: PCT/US99/28214
PRIOR FILING DATE: 1999-11-29
PRIOR APPLICATION NUMBER: PCT/US99/28313

Query Match 75.5%; Score 37; DB 2; Length 713;
 Best Local Similarity 60.0%; Pred. NO. 32; Mismatches 0; Indels 0; Gaps 0;
 Matches 6; Conservative 4;

US-09-904-920A-245
 ORGANISM: Homo Sapien

1 HSFGVAVTE 10
 |||:||:||:
 135 HSPAGLASIQ 144

RESULT 23
 US-09-909-064-245
 ; Sequence 245, Application US/0909064
 ; GENERAL INFORMATION:
 ; Patent No. 6818449
 ; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napoleone
 ; APPLICANT: Filvaroff, Eileen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillan, Kenneth, J.
 ; APPLICANT: Kliazin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William, I.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; TITLE OF INVENTION: Acids Encoding the Same

Query Match 75.5%; Score 37; DB 2; Length 713;
 Best Local Similarity 60.0%; Pred. NO. 32; Mismatches 0; Indels 0; Gaps 0;
 Matches 6; Conservative 4;

Qy 1 HSFGVAVTE 10
 US-09-909-064-245
 Db 135 HSPAGLASIQ 144

RESULT 24
 US-09-905-381A-245
 ; Sequence 245, Application US/0905381A
 ; Patents
 ; General Information:
 ; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napoleone
 ; APPLICANT: Filvaroff, Eileen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillan, Kenneth, J.
 ; APPLICANT: Kliazin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William, I.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.

; APPLICANT: Hillian, Kenneth, J.
 ; APPLICANT: Kjavin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tumas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William, I.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic Acids Encoding the Same
 ; FILE REFERENCE: 10466-14
 ; CURRENT FILING DATE: US/09/905,381A
 ; CURRENT FILING DATE: 2001-07-13
 ; PRIOR APPLICATION NUMBER: PCT/US00/04414
 ; PRIOR FILING DATE: 2000-02-22
 ; PRIOR APPLICATION NUMBER: US 60/143, 048
 ; PRIOR FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: US 60/145, 698
 ; PRIOR FILING DATE: 1999-07-26
 ; PRIOR APPLICATION NUMBER: US 60/146, 222
 ; PRIOR FILING DATE: 1999-07-28
 ; PRIOR APPLICATION NUMBER: PCT/US99/20594
 ; PRIOR FILING DATE: 1999-09-08
 ; PRIOR APPLICATION NUMBER: PCT/US99/20944
 ; PRIOR FILING DATE: 1999-09-13
 ; PRIOR APPLICATION NUMBER: PCT/US99/21090
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/21547
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/23089
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ; PRIOR FILING DATE: 1999-11-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/28313
 ; PRIOR FILING DATE: 1999-11-10
 ; PRIOR APPLICATION NUMBER: PCT/US99/283564
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/28365
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/30095
 ; PRIOR FILING DATE: 1999-12-16
 ; PRIOR APPLICATION NUMBER: PCT/US99/30911
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US99/30999
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US00/00219
 ; PRIOR FILING DATE: 2000-01-05
 ; NUMBER OF SEQ ID NOS: 423
 ; SEQ ID NO: 245
 ; LENGTH: 713
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 ; US-09-905-381A-245

Query Match 75.5%; Score 37; DB 2; Length 713;
 Best Local Similarity 60.0%; Pred. No. 32; 0; Indels 0; Gaps 0;
 Matches 6; Conservative 4; Mismatches 0;

Qy 1 HSFGVAVSE 10
 Db 135 HSFGAGASLQ 144

RESULT 25
 US-09-906-618-245
 ; Sequence 245, Application US/09906618
 ; GENERAL INFORMATION:
 ; Patent No. 6828146
 ; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David

Query Match 75.5%; Score 37; DB 2; Length 713;
 Best Local Similarity 60.0%; Pred. No. 32; 0; Indels 0; Gaps 0;
 Matches 6; Conservative 4; Mismatches 0;

Qy 1 HSFGVAVSE 10
 Db 135 HSFGAGASLQ 144

; ORGANISM: Homo Sapien
 ; SEQ ID NO: 245
 ; LENGTH: 713
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 ; US-09-906-618-245

Query Match 75.5%; Score 37; DB 2; Length 713;
 Best Local Similarity 60.0%; Pred. No. 32; 0; Indels 0; Gaps 0;
 Matches 6; Conservative 4; Mismatches 0;

Qy 1 HSFGVAVSE 10
 Db 135 HSFGAGASLQ 144

```

Db 135 |||:|||: HSFAGLSQLQ 144
RESULT 26
; Sequence 245, Application US/09906646
; GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; PATENT NO. 6852848
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Borstein, Austin L.
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillin, Kenneth J.
; APPLICANT: Kijavil, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William, I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/906,645
; CURRENT FILING DATE: 2002-01-22
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05

```

```

; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO: 245
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Homo Sapien
US-09-906-646-245
Query Match 75.5%; Score 37; DB 2; Length 713;
Best Local Similarity 60.0%; Pred. No. 32;
Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
Qy 1 HSFAGLSQLQ 10
Db 135 HSFAGLSQLQ 144
RESULT 27
US-09-904-462-245
Sequence 245, Application US/09904462
GENERAL INFORMATION:
; APPLICANT: Genentech, Inc.
; APPLICANT: Ashkenazi, Avi
; APPLICANT: Botstein, David
; APPLICANT: Desnoyers, Luc
; APPLICANT: Eaton, Dan L.
; APPLICANT: Ferrara, Napoleon
; APPLICANT: Filvaroff, Ellen
; APPLICANT: Fong, Sherman
; APPLICANT: Gao, Wei-Qiang
; APPLICANT: Gerber, Hanspeter
; APPLICANT: Gerritsen, Mary E.
; APPLICANT: Goddard, A.
; APPLICANT: Godowski, Paul J.
; APPLICANT: Grimaldi, Christopher J.
; APPLICANT: Gurney, Austin L.
; APPLICANT: Hillin, Kenneth J.
; APPLICANT: Kijavil, Ivar J.
; APPLICANT: Mather, Jennie P.
; APPLICANT: Pan, James
; APPLICANT: Paoni, Nicholas F.
; APPLICANT: Roy, Margaret Ann
; APPLICANT: Stewart, Timothy A.
; APPLICANT: Tumas, Daniel
; APPLICANT: Williams, P. Mickey
; APPLICANT: Wood, William I.
; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: 10466-14
; CURRENT APPLICATION NUMBER: US/09/904,462
; CURRENT FILING DATE: 2001-07-13
; PRIOR APPLICATION NUMBER: US 60/145,350
; PRIOR FILING DATE: 000-09-18
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; PRIOR FILING DATE: 2000-01-05

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PRIOR APPLICATION NUMBER: PCT/US99/28313
 ; PRIOR FILING DATE: 1999-11-30
 ; PRIOR APPLICATION NUMBER: PCT/US99/28564
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/28565
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/30095
 ; PRIOR FILING DATE: 1999-12-16
 ; PRIOR APPLICATION NUMBER: PCT/US99/30911
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US99/30999
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US00/00219
 ; PRIOR FILING DATE: 2000-01-05
 ; NUMBER OF SEQ ID NOS: 423
 ; SEQ ID NO: 245
 ; LENGTH: 713
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 ; SEQ ID NO: 904-462-245

Query Match 75.5%; Score 37; DB 2; Length 713;
 Best Local Similarity 60.0%; Pred. No. 32;
 Matches 6; Conservative 4; Mismatches 0;
 Gaps 0;

Qy 1 HSFSGVAVSE 10
 Db 135 HSFAGGLSLQ 144

RESULT 28
 US-09-902-736A-245
 ; Sequence 245, Application US/09902736A
 ; GENERAL INFORMATION:
 ; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napolitano
 ; APPLICANT: Filaroff, Ellen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillian, Kenneth, J.
 ; APPLICANT: Kliavkin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tunas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William, I.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; Title of Invention: Acids Encoding the Same
 ; FILE REFERENCE: 10466-14
 ; CURRENT APPLICATION NUMBER: US/09/902,736A
 ; CURRENT FILING DATE: 2001-07-10
 ; PRIOR APPLICATION NUMBER: PCT/US00/04414
 ; PRIOR FILING DATE: 2000-02-22
 ; PRIOR APPLICATION NUMBER: US 60/143,048
 ; PRIOR FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: US 60/145,698
 ; PRIOR FILING DATE: 1999-07-26
 ; PRIOR APPLICATION NUMBER: US 60/146,222
 ; PRIOR FILING DATE: 1999-07-28

PRIOR APPLICATION NUMBER: PCT/US99/20594
 ; PRIOR FILING DATE: 1999-09-08
 ; PRIOR APPLICATION NUMBER: PCT/US99/20944
 ; PRIOR FILING DATE: 1999-09-13
 ; PRIOR APPLICATION NUMBER: PCT/US99/21090
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/21547
 ; PRIOR FILING DATE: 1999-09-15
 ; PRIOR APPLICATION NUMBER: PCT/US99/23089
 ; PRIOR FILING DATE: 1999-10-05
 ; PRIOR APPLICATION NUMBER: PCT/US99/28214
 ; PRIOR FILING DATE: 1999-11-29
 ; PRIOR APPLICATION NUMBER: PCT/US99/28313
 ; PRIOR FILING DATE: 1999-11-30
 ; PRIOR APPLICATION NUMBER: PCT/US99/28564
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/28565
 ; PRIOR FILING DATE: 1999-12-02
 ; PRIOR APPLICATION NUMBER: PCT/US99/30095
 ; PRIOR FILING DATE: 1999-12-16
 ; PRIOR APPLICATION NUMBER: PCT/US99/30911
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US99/30999
 ; PRIOR FILING DATE: 1999-12-20
 ; PRIOR APPLICATION NUMBER: PCT/US00/00219
 ; PRIOR FILING DATE: 2000-01-05
 ; NUMBER OF SEQ ID NOS: 423
 ; SEQ ID NO: 245
 ; LENGTH: 713
 ; TYPE: PRT
 ; ORGANISM: Homo Sapien
 ; SEQ ID NO: 902-736A-245

Query Match 75.5%; Score 37; DB 2; Length 713;
 Best Local Similarity 60.0%; Pred. No. 32;
 Matches 6; Conservative 4; Mismatches 0;
 Gaps 0;

Qy 1 HSFSGVAVSE 10
 Db 135 HSFAGGLSLQ 144

RESULT 29
 US-09-906-722A-245
 ; Sequence 245, Application US/09906722A
 ; Patent No. 6,462,622
 ; GENERAL INFORMATION:
 ; APPLICANT: Genentech, Inc.
 ; APPLICANT: Ashkenazi, Avi
 ; APPLICANT: Botstein, David
 ; APPLICANT: Desnoyers, Luc
 ; APPLICANT: Eaton, Dan L.
 ; APPLICANT: Ferrara, Napoleone
 ; APPLICANT: Filaroff, Ellen
 ; APPLICANT: Fong, Sherman
 ; APPLICANT: Gao, Wei-Qiang
 ; APPLICANT: Gerber, Hanspeter
 ; APPLICANT: Gerritsen, Mary E.
 ; APPLICANT: Goddard, A.
 ; APPLICANT: Godowski, Paul J.
 ; APPLICANT: Grimaldi, Christopher J.
 ; APPLICANT: Gurney, Austin L.
 ; APPLICANT: Hillian, Kenneth, J.
 ; APPLICANT: Kliavkin, Ivar J.
 ; APPLICANT: Mather, Jennie P.
 ; APPLICANT: Pan, James
 ; APPLICANT: Paoni, Nicholas F.
 ; APPLICANT: Roy, Margaret Ann
 ; APPLICANT: Stewart, Timothy A.
 ; APPLICANT: Tunas, Daniel
 ; APPLICANT: Williams, P. Mickey
 ; APPLICANT: Wood, William, I.
 ; TITLE OF INVENTION: Secreted and Transmembrane Polypeptides and Nucleic
 ; Title of Invention: Acids Encoding the Same
 ; FILE REFERENCE: 10466-14
 ; CURRENT APPLICATION NUMBER: US/09/902,736A
 ; CURRENT FILING DATE: 2001-07-10
 ; PRIOR APPLICATION NUMBER: PCT/US00/04414
 ; PRIOR FILING DATE: 2000-02-22
 ; PRIOR APPLICATION NUMBER: US 60/143,048
 ; PRIOR FILING DATE: 1999-07-07
 ; PRIOR APPLICATION NUMBER: US 60/145,698
 ; PRIOR FILING DATE: 1999-07-26
 ; PRIOR APPLICATION NUMBER: US 60/146,222
 ; PRIOR FILING DATE: 1999-07-28

; TITLE OF INVENTION: Acids Encoding the Same
; FILE REFERENCE: GNE_161B2C61
; CURRENT APPLICATION NUMBER: US/09/9067722A
; CURRENT FILING DATE: 2001-07-16
; PRIOR APPLICATION NUMBER: PCT/US00/04414
; PRIOR FILING DATE: 2000-02-22
; PRIOR APPLICATION NUMBER: US 60/143,048
; PRIOR FILING DATE: 1999-07-07
; PRIOR APPLICATION NUMBER: US 60/145,698
; PRIOR FILING DATE: 1999-07-26
; PRIOR APPLICATION NUMBER: US 60/146,222
; PRIOR FILING DATE: 1999-07-28
; PRIOR APPLICATION NUMBER: PCT/US99/20594
; PRIOR FILING DATE: 1999-09-08
; PRIOR APPLICATION NUMBER: PCT/US99/20944
; PRIOR FILING DATE: 1999-09-13
; PRIOR APPLICATION NUMBER: PCT/US99/21090
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/21547
; PRIOR FILING DATE: 1999-09-15
; PRIOR APPLICATION NUMBER: PCT/US99/23089
; PRIOR FILING DATE: 1999-10-05
; PRIOR APPLICATION NUMBER: PCT/US99/28214
; PRIOR FILING DATE: 1999-11-29
; PRIOR APPLICATION NUMBER: PCT/US99/28313
; PRIOR FILING DATE: 1999-11-30
; PRIOR APPLICATION NUMBER: PCT/US99/28564
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/28565
; PRIOR FILING DATE: 1999-12-02
; PRIOR APPLICATION NUMBER: PCT/US99/30095
; PRIOR FILING DATE: 1999-12-16
; PRIOR APPLICATION NUMBER: PCT/US99/30911
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US99/30999
; PRIOR FILING DATE: 1999-12-20
; PRIOR APPLICATION NUMBER: PCT/US00/00219
; NUMBER OF SEQ ID NOS: 423
; SEQ ID NO: 245
; LENGTH: 713
; TYPE: PRT
; ORGANISM: Homo Sapien
; US-09-9067722A-245

Query Match 75.5%; Score 37; DB 2; Length 713;
Best Local Similarity 60.0%; Pred. No. 32; Mismatches 0; Indels 0; Gaps 0;

RESULT 30
US-09-949-016-9997
; Sequence 9997, Application US/09949016
; Patent No. 6812339
; GENERAL INFORMATION:
; APPLICANT: VENTER, J. Craig et al.
; TITLE OF INVENTION: POLYMORPHISMS IN KNOWN GENES ASSOCIATED
; WITH HUMAN DISEASE, METHODS OF DETECTION AND USES THEREOF
; FILE REFERENCE: CLO01307
; CURRENT APPLICATION NUMBER: US/09/949,016
; CURRENT FILING DATE: 2000-04-14
; PRIOR APPLICATION NUMBER: 60/241,755
; PRIOR FILING DATE: 2000-10-20
; PRIOR APPLICATION NUMBER: 60/237,768
; PRIOR FILING DATE: 2000-10-03
; PRIOR APPLICATION NUMBER: 60/231,498
; PRIOR FILING DATE: 2000-09-08
; NUMBER OF SEQ ID NOS: 207012
; SOFTWARE: FastSBQ for Windows Version 4.0

Query Match 75.5%; Score 37; DB 2; Length 857;
Best Local Similarity 60.0%; Pred. No. 39; Mismatches 0; Indels 0; Gaps 0;

RESULT 31
US-09-252-991A-21097
; Sequence 21097, Application US/09252991A
; Patent No. 65511795
; GENERAL INFORMATION:
; APPLICANT: Marc J. Rubenstein et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
; FILE REFERENCE: 107196-136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO: 21097
; LENGTH: 282
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
; US-09-252-991A-21097

Query Match 73.5%; Score 36; DB 2; Length 282;
Best Local Similarity 70.0%; Pred. No. 18; Mismatches 2; Indels 0; Gaps 0;

RESULT 32
US-09-248-796A-15329
; Sequence 15329, Application US/09248796A
; Patent No. 6747137
; GENERAL INFORMATION:
; APPLICANT: Keith Weinstock et al.
; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBI
; FILE REFERENCE: 107196-132
; CURRENT FILING DATE: 1999-02-12
; PRIOR APPLICATION NUMBER: US 60/074,725
; PRIOR FILING DATE: 1998-02-13
; PRIOR APPLICATION NUMBER: US 60/096,409
; PRIOR FILING DATE: 1998-08-13
; NUMBER OF SEQ ID NOS: 28208
; SEQ ID NO: 15329
; LENGTH: 334
; TYPE: PRT
; ORGANISM: Candida albicans
; FEATURE:
; NAME/KEY: UNSURE
; LOCATION: (29)
; OTHER INFORMATION: Identity of amino acid sequences at the above locations are un
; US-09-248-796A-15329

Query Match 71.4%; Score 35; DB 2; Length 334;

Best Local Similarity 66.7%; Pred. No. 35; Matches 6; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSFGVAVS 9
Db 101 HSFGGAASI 109

RESULT 33
US-09-701-868-11
Sequence 11, Application US/09701868
Patent No. 6872813
GENERAL INFORMATION:
APPLICANT: U.S. Department of Agriculture
TITLE OF INVENTION: Genes Coding For Tomato Beta-Calactosidase Polypeptides
FILE REFERENCE: 70608/125650
CURRENT APPLICATION NUMBER: US/09/701,868
PRIORITY FILING DATE: 2000-12-05
PRIOR FILING DATE: 60/088,805
NUMBER OF SEQ ID NOS: 14
SEQ ID NO 11
LENGTH: 724
TYPE: PRT
ORGANISM: Lycopersicon esculentum
US-09-701-868-11

Query Match 69.4%; Score 34; DB 2; Length 724;
Best Local Similarity 70.0%; Pred. No. 1.3e+02; Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSFGVAVS 10
Db 594 HSLGGSSSVE 603

RESULT 34
US-09-701-868-10
Sequence 10, Application US/09701868
Patent No. 6872813
GENERAL INFORMATION:
APPLICANT: U.S. Department of Agriculture
TITLE OF INVENTION: Genes Coding For Tomato Beta-Calactosidase Polypeptides
FILE REFERENCE: 70608/125650
CURRENT APPLICATION NUMBER: US/09/701,868
PRIORITY FILING DATE: 2000-12-05
PRIOR FILING DATE: 60/088,805
NUMBER OF SEQ ID NOS: 14
SOFTWARE: PatentIn Ver. 2.1
SEQ ID NO 10
LENGTH: 838
TYPE: PRT
ORGANISM: Lycopersicon esculentum
US-09-701-868-10

Query Match 69.4%; Score 34; DB 2; Length 838;
Best Local Similarity 70.0%; Pred. No. 1.6e+02; Matches 7; Conservative 1; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSFGVAVS 10
Db 595 HSLGGSSSVE 604

RESULT 35
US-09-252-991A-21116
Sequence 21116, Application US/09252991A
Patent No. 6551755
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS

; TITLE OF INVENTION: AERUGINOSA FOR DIAGNOSTICS AND THERAPEUTICS
; FILE REFERENCE: 1-0719-136
; CURRENT APPLICATION NUMBER: US/09/252,991A
; CURRENT FILING DATE: 1999-02-18
; PRIOR APPLICATION NUMBER: US 60/074,788
; PRIOR FILING DATE: 1998-02-18
; PRIOR APPLICATION NUMBER: US 60/094,190
; PRIOR FILING DATE: 1998-07-27
; NUMBER OF SEQ ID NOS: 33142
; SEQ ID NO 21116
; LENGTH: 266
; TYPE: PRT
; ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-21116

Query 1 HSFGVAVS 8
Db 172 HSFGGMGS 179

RESULT 36
US-08-907-674-1
Sequence 1, Application US/08907674
Patent No. 5919685
GENERAL INFORMATION:
APPLICANT: Bandman, Olga
APPLICANT: Shah, Purvi
APPLICANT: Guegler, Karl J.
APPLICANT: Corley, Neil C.
TITLE OF INVENTION: HUMAN AFLATOXIN B1 ALDEHYDE REDUCTASE
NUMBER OF SEQUENCES: 3
CORRESPONDENCE ADDRESS:
ADDRESSEE: Incyte Pharmaceuticals, Inc.
STREET: 3174 Porter Drive
CITY: Palo Alto
STATE: CA
COUNTRY: USA
ZIP: 94304
COMPUTER READABLE FORM:
MEDIUM TYPE: Diskette
COMPUTER: IBM Compatible
OPERATING SYSTEM: DOS
SOFTWARE: FASTSEQ FOR Windows Version 2.0
CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/907,674
FILING DATE: Herewith
CLASSIFICATION: 514
NAME: Billings, Lucy J.
REGISTRATION NUMBER: 36,749
REFERENCE/DOCKET NUMBER: PF-0362 US
TELECOMMUNICATION INFORMATION:
TELEPHONE: 415-855-0555
TELEFAX: 415-845-4166
TELEX:
INFORMATION FOR SEQ ID NO: 1:
SEQUENCE CHARACTERISTICS:
LENGTH: 331 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
IMMEDIATE SOURCE:
LIBRARY: BRAINOT14
CLONE: 1596452
US-08-907-674-1

Query Match 67.3%; Score 33; DB 1; Length 331;
 Best Local Similarity 60.0%; Pred. No. 90;
 Matches 6; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 1 HSFGVASYE 10
 Db 240 HHFEGIALVE 249

RESULT 37

US-09-215-087-1
 ; Sequence 1, Application US/09215087
 ; Patent No. 5981244
 ; GENERAL INFORMATION:
 ; APPLICANT: Bandman, Olga
 ; APPLICANT: Shah, Purvi
 ; APPLICANT: Guegler, Karl J.
 ; APPLICANT: Corley, Neil C.
 ; TITLE OF INVENTION: HUMAN AFLATOXIN B1 ALDEHYDE REDUCTASE
 ; NUMBER OF SEQUENCES: 3
 ; CORRESPONDENCE ADDRESS:
 ; ADDRESSEE: Incyte Pharmaceuticals, Inc.
 ; STREET: 3174 Porter Drive
 ; CITY: Palo Alto
 ; STATE: CA
 ; COUNTRY: USA
 ; ZIP: 94304
 ; COMPUTER READABLE FORM:
 ; MEDIUM TYPE: Diskette
 ; COMPUTER: IBM Compatible
 ; OPERATING SYSTEM: DOS
 ; SOFTWARE: FastSEQ for Windows Version 2.0
 ; CURRENT APPLICATION DATA:
 ; APPLICATION NUMBER: US/09/391,959
 ; FILING DATE:
 ; CLASSIFICATION:
 ; PRIOR APPLICATION DATA:
 ; APPLICATION NUMBER: 08/907,674
 ; FILING DATE:
 ; ATTORNEY/AGENT INFORMATION:
 ; NAME: Billings, Lucy J.
 ; REGISTRATION NUMBER: 36,749
 ; REFERENCE/DOCKET NUMBER: PF-0362 US
 ; TELECOMMUNICATION INFORMATION:
 ; TELEPHONE: 415-855-0555
 ; TELEFAX: 415-845-4166
 ; TELEX:
 ; INFORMATION FOR SEQ ID NO: 1:
 ; SEQUENCE CHARACTERISTICS:
 ; LENGTH: 331 amino acids
 ; TYPE: amino acid
 ; STRANDEDNESS: Single
 ; TOPOLOGY: linear
 ; IMMEDIATE SOURCE:
 ; LIBRARY: BRAINOT14
 ; CLONE: 1596452

Query Match 67.3%; Score 33; DB 1; Length 331;
 Best Local Similarity 60.0%; Pred. No. 90;
 Matches 6; Conservative 1; Mismatches 3; Indels 0; Gaps 0;

Qy 1 HSFGVASYE 10
 Db 240 HHFEGIALVE 249

RESULT 38

US-09-191-959-1
 ; Sequence 1, Application US/09391959
 ; Patent No. 607104
 ; GENERAL INFORMATION:
 ; APPLICANT: Bandman, Olga

US-09-914-286-4

Query Match 67.3%; Score 33; DB 2; Length 6239;
 Best Local Similarity 75.0%; Pred. No. 2.3e+03;
 Matches 6; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSPGVAS 8
 Db 5287 HSFGTAS 5294

RESULT 40
 ; Sequence 21389, Application US/09248796A
 ; Patent No. 6747137
 ; GENERAL INFORMATION:
 ; APPLICANT: Keith Weinstock et al
 ; TITLE OF INVENTION: NUCLEAR ACID AND AMINO ACID SEQUENCES RELATING TO CANDIDA ALBICAN
 ; FILE REFERENCE: 107196.13
 ; CURRENT APPLICATION NUMBER: US/09/248.796A
 ; CURRENT FILING DATE: 1999-02-12
 ; PRIOR APPLICATION NUMBER: US 60/074,725
 ; PRIOR FILING DATE: 1998-02-13
 ; PRIOR APPLICATION NUMBER: US 60/096,409
 ; PRIOR FILING DATE: 1998-08-13
 ; NUMBER OF SEQ ID NOS: 28208
 ; SEQ ID NO: 21389
 ; LENGTH: 205
 ; TYPE: PRT
 ; ORGANISM: Candida albicans

Query Match 65.3%; Score 32; DB 2; Length 205;
 Best Local Similarity 62.5%; Pred. No. 85;
 Matches 5; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSPGVAS 8
 Db 117 HSFGTAA 124

RESULT 41
 ; Sequence 4, Application US/09857612A
 ; Patent No. 6940003
 ; GENERAL INFORMATION:
 ; APPLICANT: E. I. du Pont de Nemours and Company
 ; TITLE OF INVENTION: Plant Lecithin:Cholesterol Acyltransferases
 ; FILE REFERENCE: BB1262
 ; CURRENT APPLICATION NUMBER: US/09/857,612A
 ; CURRENT FILING DATE: 2001-10-18
 ; PRIOR APPLICATION NUMBER: 60/110,782
 ; PRIOR FILING DATE: 1998-12-03
 ; NUMBER OF SEQ ID NOS: 15
 ; SOFTWARE: Microsoft Office 97
 ; SEQ ID NO: 4
 ; LENGTH: 233
 ; TYPE: PRT
 ; ORGANISM: Zea mays

Query Match 65.3%; Score 32; DB 2; Length 233;
 Best Local Similarity 50.0%; Pred. No. 98;
 Matches 5; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSPGVASV 10
 Db 206 HSFGMVALE 215

RESULT 42
 ; Sequence 10735, Application US/0989039A
 ; Patent No. 6610836
 ; GENERAL INFORMATION:
 ; APPLICANT: Gary Breton et. al
 ; TITLE OF INVENTION: NUCLEAR ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
 ; FILE REFERENCE: 2709.104001
 ; CURRENT APPLICATION NUMBER: US/09/489,039A
 ; CURRENT FILING DATE: 2000-01-27
 ; PRIOR APPLICATION NUMBER: US 60/117,747
 ; PRIOR FILING DATE: 1999-01-29
 ; NUMBER OF SEQ ID NOS: 14342
 ; SEQ ID NO: 10735
 ; LENGTH: 263
 ; TYPE: PRT
 ; ORGANISM: Klebsiella pneumoniae

Query Match 65.3%; Score 32; DB 2; Length 263;
 Best Local Similarity 100.0%; Pred. No. 1.1e-02;
 Matches 6; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFGV 6
 Db 257 HSFGV 262

RESULT 43
 ; Sequence 8, Application US/09857612A
 ; Patent No. 6940003
 ; GENERAL INFORMATION:
 ; APPLICANT: E. I. du Pont de Nemours and Company
 ; TITLE OF INVENTION: Plant Lecithin:Cholesterol Acyltransferases
 ; FILE REFERENCE: BB1262
 ; CURRENT APPLICATION NUMBER: US/09/857,612A
 ; CURRENT FILING DATE: 2001-10-18
 ; PRIOR APPLICATION NUMBER: 60/110,782
 ; NUMBER OF SEQ ID NOS: 15
 ; SOFTWARE: Microsoft Office 97
 ; SEQ ID NO: 8
 ; LENGTH: 414
 ; TYPE: PRT
 ; ORGANISM: Zea mays

Query Match 65.3%; Score 32; DB 2; Length 434;
 Best Local Similarity 50.0%; Pred. No. 1.9e+02;
 Matches 5; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
 Db 208 HSFGMVALE 217

RESULT 44
 ; Sequence 12, Application US/09857612A
 ; Patent No. 6940003
 ; GENERAL INFORMATION:
 ; APPLICANT: E. I. du Pont de Nemours and Company
 ; TITLE OF INVENTION: Plant Lecithin:Cholesterol Acyltransferases
 ; FILE REFERENCE: BB1262
 ; CURRENT APPLICATION NUMBER: US/09/857,612A
 ; CURRENT FILING DATE: 2001-10-18
 ; PRIOR APPLICATION NUMBER: 60/110,782
 ; PRIOR FILING DATE: 1998-12-03
 ; NUMBER OF SEQ ID NOS: 15
 ; SOFTWARE: Microsoft Office 97
 ; SEQ ID NO: 12
 ; LENGTH: 439
 ; TYPE: PRT

US-09-489-039A-10735

ORGANISM: Zea mays
US-09-857-012A-12

Query Match Score 32; DB 2; Length 439;
Best Local Similarity 50.0%; Pred. No. 2e+02;
Matches 5; Conservative 3; Mismatches 2; Indels 0; Gaps 0;

Oy 1 HSFSGVAVS 10
Db 206 HSFGGVAVLE 215

RESULT 45 US-08-801-344-9

Sequence 9, Application US/08801344
Patent No. 6087140

GENERAL INFORMATION:
APPLICANT: Cameron, Douglas C.
APPLICANT: Shaw, Anita J.
APPLICANT: Altaras, Nedim E.

TITLE OF INVENTION: MICROBIAL PRODUCTION OF
TITLE OF INVENTION: 1,2-PROPANEDIOL FROM SUGAR
NUMBER OF SEQUENCES: 11

CORRESPONDENCE ADDRESS:
ADDRESSEE: Dewitt Ross & Stevens S.C.
STREET: 8000 Excelsior Drive, Suite 401
CITY: Madison
STATE: WI
COUNTRY: U.S.A.
ZIP: 53717-1914

COMPUTER READABLE FORM:
MEDIUM TYPE: Floppy disk
COMPUTER: IBM PC compatible
OPERATING SYSTEM: PC-DOS/MS-DOS
SOFTWARE: PatentIn Release #1.0, Version #1.30

CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/09/498,599
FILING DATE:
CLASSIFICATION:
ATTORNEY/AGENT INFORMATION:
NAME: Sia, Charles S.
REFERENCE/DOCKET NUMBER: 09820.037
TELECOMMUNICATION INFORMATION:
TELEPHONE: 608-831-2100
TELEFAX: 608-831-2106
INFORMATION FOR SEQ ID NO: 9:
SEQUENCE CHARACTERISTICS:
LENGTH: 462 amino acids
TYPE: amino acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: peptide
HYPOTHETICAL: NO
ANTI-SENSE: NO
FRAGMENT TYPE: N-terminal
ORIGINAL SOURCE:
ORGANISM: Pyridine nucleotide transhydrogenase, subunit B

US-09-498-599-9

Query Match Score 32; DB 2; Length 462;
Best Local Similarity 66.7%; Pred. No. 2.1e+02;
Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Oy 1 HSFSGVAVS 9
Db 91 HSFGVGLAV 99

RESULT 47 US-09-489-039A-13942

Sequence 13942, Application US/09489039A
Patent No. 6510836

GENERAL INFORMATION:
APPLICANT: Gary Breton et. al
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO KLEBSIELLA
FILE REFERENCE: 2709.204001

CURRENT APPLICATION NUMBER: US/09/489,039A
CURRENT FILING DATE: 2000-01-27
PRIOR APPLICATION NUMBER: US 60/117,747
PRIOR FILING DATE: 1999-01-29
NUMBER OF SEQ ID NOS: 14342
SEQ ID NO: 13942
LENGTH: 463

TYPE: PRT
ORGANISM: Klebsiella pneumoniae
US-09-489-039A-13942

RESULT 46 US-09-498-599-9

Sequence 9, Application US/09498599
Patent No. 6303352

Query Match 65.3%; Score 32; DB 2; Length 463;
 Best Local Similarity 66.7%; Pred. No. 2.1e+02;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;
 Qy 1 HSFSGVAVS 9
 Db 92 HSFVGLRAV 100

RESULT 48
 US-09-543-681A-4671
 ; Sequence 4671, Application US/09543681A
 ; GENERAL INFORMATION:
 ; APPLICANT: GARY BRETON
 ; TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PROTEUS MIRABILIS
 ; FILE REFERENCE: 2709.1002-001
 ; CURRENT APPLICATION NUMBER: US/09/543,681A
 ; CURRENT FILING DATE: 2000-04-05
 ; PRIOR APPLICATION NUMBER: US 60/128,706
 ; PRIOR FILING DATE: 1999-04-09
 ; NUMBER OF SEQ ID NOS: 8344
 ; SEQ ID NO 4671
 ; LENGTH: 468
 ; TYPE: PRT
 ; ORGANISM: Proteus mirabilis
 US-09-543-681A-4671

Query Match 65.3%; Score 32; DB 2; Length 468;
 Best Local Similarity 66.7%; Pred. No. 2.1e+02;
 Matches 6; Conservative 2; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFSGVAVS 9
 Db 92 HSFVGLRAV 105

RESULT 49
 US-09-701-868-8
 ; Sequence 8, Application US/09701868
 ; Patent No. 6872813
 ; GENERAL INFORMATION:
 ; APPLICANT: U.S. Department of Agriculture
 ; TITLE OF INVENTION: Genes Coding For Tomato Beta-Galactosidase Polypeptides
 ; FILE REFERENCE: 70608/12/650
 ; CURRENT APPLICATION NUMBER: US/09/701,868
 ; CURRENT FILING DATE: 2000-12-05
 ; PRIOR APPLICATION NUMBER: 60/088,805
 ; PRIOR FILING DATE: 1998-06-09
 ; NUMBER OF SEQ ID NOS: 14
 ; SEQ ID NO 8
 ; LENGTH: 835
 ; TYPE: PRT
 ; ORGANISM: Lycopersicon esculentum
 US-09-701-868-8

Query Match 65.3%; Score 32; DB 2; Length 835;
 Best Local Similarity 70.0%; Pred. No. 4e+02;
 Matches 7; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 1 HSFSGVAVS 10
 Db 592 HSLSGSPSVE 601

RESULT 50
 US-08-636-944-19
 ; Sequence 19, Application US/08636944
 ; Patent No. 5981811
 ; GENERAL INFORMATION:
 ; APPLICANT: Sumant CHENGAPPA

Qy 1 HSFSGVAVS 10
 Db 592 HSLSGSPSVE 601

RESULT 49
 Search completed: April 5, 2006, 17:44:42
 Job time : 49 secs

Query Match 65.3%; Score 32; DB 1; Length 838;
 Best Local Similarity 70.0%; Pred. No. 4e+02;
 Matches 7; Conservative 0; Mismatches 3; Indels 0; Gaps 0;
 Qy 1 HSFSGVAVS 10
 Db 595 HSLSGSPSVE 604

GenCore version 5.1.7
 Copyright (c) 1993 - 2006 Biocceleration Ltd.

OM protein - protein search, using sw model

Run on: April 5, 2006, 17:35:24 ; Search time 189 Seconds
 (without alignments)
 23.248 Million cell updates/sec

Title: US-10-772-537-4
 Perfect score: 49

Sequence: 1 HSFGVASVE 10

Scoring table: BL0SUM62

Gapop 10.0 , Gapext 0.5

Searched: 2443163 seqs, 439378781 residues

Total number of hits satisfying chosen parameters: 2443163

Minimum DB seq length: 0
 Maximum DB seq length: 20000000000

Post-processing: Minimum Match 0%
 Maximum Match 100%

Listing first 100 summaries

Database : A_Geneseq_21:
 1: geneseqp1980s:
 2: geneseqp1990s:
 3: geneseqp2000s:
 4: geneseqp2001s:
 5: geneseqp2002s:
 6: geneseqp2003as:
 7: geneseqp2003bs:
 8: geneseqp2004bs:
 9: geneseqp2005s:

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query	Match	Length	DB	ID	Description
1	49	100.0	10	6	ABU63696		Abus3696 Pig fetui
2	49	100.0	10	6	ADA26731		Ada26731 Pig fetui
3	49	100.0	10	9	ADVA4763		Adva4763 Porcine f
4	46	93.9	10	6	ABU63698		Abu63698 Rat fetui
5	46	93.9	10	6	ABU63697		Abu63697 Sheep fet
6	46	93.9	10	6	ABU08898		Abu08898 Bovine fet
7	46	93.9	10	6	ADA26728		Ada26728 Bovine fe
8	46	93.9	10	6	ADA26733		Ada26733 Rat fetui
9	46	93.9	10	6	ADA26732		Ada26732 Sheep fet
10	46	93.9	10	9	ADVA4760		Adva4760 Bovine fe
11	46	93.9	10	9	ADVA4765		Adva4765 Rat fetui
12	46	93.9	10	9	ADVA4764		Adva4764 Ovine fet
13	46	93.9	18	7	AEA18929		Aea18929 Bovine Se
14	46	93.9	341	4	AAB30555		Aab30555 Amino aci
15	46	93.9	359	2	AAW61491		Aaw61491 Human fet
16	46	93.9	359	2	AAY07247		Aay07247 Human fet
17	46	93.9	359	3	AAY56590		Aay56590 Bovine fe
18	46	93.9	359	5	ABB78019		Abb78019 Bovine al
19	38	77.6	77.6	10	ABU63699		Abu63699 Mouse fet
20	38	77.6	77.6	10	ADA26734		Ada26734 Mouse fet
21	38	77.6	10	9	ADVA4766		Adva4766 Murine fe
22	38	77.6	346	5	ABB78017		Abb78017 Murine al
23	38	77.6	352	5	ABB78018		Abb78018 Rat alpha
24	38	77.6	352	7	Add48974		Add48974 Rat Prote

25	38	77.6	352	7	ADF30521	Rat angio
26	37	75.5	352	7	ADF30523	Rat angio
27	37	75.5	292	4	AEE0524	AEE sec
28	37	75.5	428	3	AAB40480	Human ORF
29	37	75.5	460	8	ADN72605	Thale cre
30	37	75.5	713	2	AAV13385	Amino aci
31	37	75.5	713	3	ADC78557	Human PRO
32	37	75.5	713	4	AAB80253	Human PRO
33	37	75.5	713	4	Abu71631	Human PRO
34	37	75.5	713	6	ABUT71631	Human PRO
35	37	75.5	713	6	ABUT7486	Human sec
36	37	75.5	713	6	Abu71932	Human sec
37	37	75.5	713	6	ABO01815	Novel hum
38	37	75.5	713	6	ABU54388	Human sec
39	37	75.5	713	6	Abo47403	Human sec
40	37	75.5	713	6	ABU65540	Human sec
41	37	75.5	713	6	Abu67386	Human sec
42	37	75.5	713	6	ABO11906	Human sec
43	37	75.5	713	6	Aae37179	Human LRR
44	37	75.5	713	6	Abu63663	Novel hum
45	37	75.5	713	6	Abo14845	Human sec
46	37	75.5	713	6	ADB29450	Human sec
47	37	75.5	713	6	ABU6147	Tumour-as
48	37	75.5	713	6	ADA18306	Human sec
49	37	75.5	713	6	ABO2797	Human sec
50	37	75.5	713	6	Abo34857	Human PRO
51	37	75.5	713	6	ADA16281	Human sec
52	37	75.5	713	6	ADA24246	Human sec
53	37	75.5	713	7	ABO17535	Human PRO
54	37	75.5	713	7	ADA13134	Human sec
55	37	75.5	713	7	ADA42002	Human sec
56	37	75.5	713	7	ADA17349	Human sec
57	37	75.5	713	7	ADA2852	Human sec
58	37	75.5	713	7	ABO17596	Human PRO
59	37	75.5	713	7	ADB77771	Human sec
60	37	75.5	713	7	ADB74907	Human sec
61	37	75.5	713	7	ADC28553	Human sec
62	37	75.5	713	7	ADC39753	Human sec
63	37	75.5	713	7	ADC40267	Human sec
64	37	75.5	713	7	ADC19091	Human sec
65	37	75.5	713	7	ADC4391	Human sec
66	37	75.5	713	7	ADC29446	Human sec
67	37	75.5	713	7	ADC28977	Human sec
68	37	75.5	713	7	ADC10862	Human sec
69	37	75.5	713	7	ADC19519	Human sec
70	37	75.5	713	7	ADC33967	Human sec
71	37	75.5	713	7	ADC13037	Human sec
72	37	75.5	713	7	ADC12489	Human sec
73	37	75.5	713	7	ADD05044	Human sec
74	37	75.5	713	7	ADD04050	Human sec
75	37	75.5	713	7	ADD03626	Human sec
76	37	75.5	713	7	ADE03456	Human GAC
77	37	75.5	713	7	ADE4878	Human sec
78	37	75.5	713	7	ADE18131	TAT292.
79	37	75.5	713	7	ADH9361	Human sec
80	37	75.5	713	7	Adi3140	Human sec
81	37	75.5	713	7	Adi31840	Human sec
82	37	75.5	713	8	ADE17408	Human sec
83	37	75.5	713	8	ADE19747	Human sec
84	37	75.5	713	8	ADE37423	Human sec
85	37	75.5	713	8	ADE73958	Human sec
86	37	75.5	713	8	ADE39512	Human sec
87	37	75.5	713	8	Ades8631	Human sec
88	37	75.5	713	8	Ades9058	Human sec
89	37	75.5	713	8	AdG10528	Human sec
90	37	75.5	713	8	AdF73922	Human sec
91	37	75.5	713	8	AdF73498	Human sec
92	37	75.5	713	8	AdG12341	Human sec
93	37	75.5	713	8	ADG2768	Human sec
94	37	75.5	713	8	ADH20557	Human sec
95	37	75.5	713	8	ADH7412	Human sec
96	37	75.5	713	8	ADH9957	Human sec
97	37	75.5	713	8	ADH06985	Human sec

98	37	75.5	713	8	AD18727	Human sec	Db	1	HSPGVASVE 10
99	37	75.5	713	8	AD165447	Human sec			
100	37	75.5	713	8	AD18706	Human sec			
ALIGNMENTS									
<i>Sam M. Winter</i>									
RESULT 1									
ABU63696	ID	ABU63696	standard;	peptide;	10 AA.				
XX									
AC		ABU63696;							
XX									
DT		11-OCT-2003	(first entry)						
XX									
DE		Pig fetuin apoptosis-inducing peptide fragment.							
XX									
FN		Pig; apoptosis; fetuin; cancer; alpha-2-Human serum glycoprotein;							
FN		embryonic development; foetal protein; tissue remodeling; cell death;							
FN		colon cancer; LnCaP; prostate cancer; Hep G2; Hepatoma; cytostatic;							
FN		apoptosis inducer.							
OS		Sub scrofa.							
XX									
PN		US2003087809-A1.							
XX									
PD		08-MAY-2003.							
XX									
PF		08-OCT-2002;	2002US-00267706.						
XX									
PR		18-DEC-1997;	97US-00993432.						
PR		08-SEP-1998;	98US-00149818.						
PR		07-OCT-1999;	99US-00414136.						
PR		09-JUL-2001;	2001US-00902208.						
PR		14-MAY-2002;	2002US-00145682.						
PA		(TSAI) / TSAI D.							
XX									
PI		Tsai D;							
XX									
DR		WPI; 2003-615747/58.							
XX									
PT		New compound comprising peptide fragment derived from specially prepared zinc-charged bovine fetuin, useful for treating colon and prostate cancer, by causing apoptosis in colon cancer and prostate cancer cells.							
XX									
PS		Example; Page 11; 20pp; English.							
XX									
CC	The invention relates to a compound for treatment of colon and prostate cancer produced from a peptide fragment derived from specially prepared zinc-charged bovine fetuin, where the peptide fragment corresponds to amino acid residues 30-109 of fetuin (referred to as fetuin Peptide fragment (PPF 300-309)), and human or mouse peptides that correspond to prostrate cancer cells. The invention also relates to preparing a polypeptide having apoptotic activity isolated from fetuin comprising incubating fetuin in solution with a chelating agent, isolating naked zinc fetuin, incubating the naked fetuin in solution with zinc, isolating zinc charged fetuin from the solution, drying the zinc charged fetuin, dissolving the dried zinc charged fetuin in water to form a solution and isolating from the solution the filtrates that have been predetermined to have apoptotic activity in cancer cells. The compound is useful for treating prostate or colon cancer by inducing apoptosis of the cancerous cells. This sequence represents a pig fetuin fragment of the invention.								
XX									
CC	Sequence 10 AA;								
Query Match	100.0%	Score 49;	DB 6;	Length 10;					
Best Local Similarity	100.0%	Pred. No. 0.0025;							
Matches	10;	Conservative 0;	Mismatches 0;	Indels 0;	Gaps 0;				
Qy	1 HSPGVASVE 10								
Db	1 HSPGVASVE 10								
RESULT 3									
1	HSFGVAVSE 10								
1	HSFGVAVSE 10								

AC ADV44763;
 XX XX
 DT 10-MAR-2005 (first entry)
 XX XX
 DS Porcine fetuin fragment FPF 300-09 SEQ ID NO:4.
 XX KW fetuin; colon tumor; prostate tumor; neoplasm; apoptosis; cytosstatic;
 KW protein therapy.
 XX OS Sus scrofa.
 XX PN US2004259800-A1.
 XX XX
 PD 23-DEC-2004.
 XX XX
 PF 05-FEB-2004; 2004US-00772537.
 XX PR 18-DEC-1997; 97US-0093432.
 PR 08-SEP-1998; 98US-00149878.
 PR 07-OCT-1999; 99US-00141436.
 PR 09-JULY-2001; 2001US-00902208.
 PR 14-MAY-2002; 2002US-00145682.
 XX PA (TSAI) TSAI D.
 XX PI Tsai D;
 XX WPI; 2005-038780/04.
 XX PR New compound or fetuin polypeptides useful for treating colon and

CC The invention relates to a novel compound or fetuin polypeptides for the
CC treatment of colon and prostate cancer, where the polypeptide causes
CC apoptosis in colon and prostate cancer cells. A compound or peptide of
CC the invention has cyrostatic activity, and may have a use in protein
CC therapy. The fetuin polypeptides are useful for treating colon and
CC prostate cancer, thus offering a breakthrough in cancer therapy. The
CC present sequence represents the porcine fetuin peptide fragment (FPP) 31-
CC 09, amino acids 300-309 of the full-length fetuin polypeptide.
CC

XX SQ Sequence 10 AA:
 Query Match 100.0%; Score 49; Length 10;
 Best Local Similarity 100.0%; DB 9;
 Matches 10; Pred. No. 0.0%;
 保守 0; Pred. No. 0.0%;
 Matches 10; Minmatches 0;
 Indels 0; Gaps 0;

QY	1 HSFSGYASVE 10
Ddb	1 HSFSGYASVE 10

RESULT 4

ABU63698 standard; peptide; 10 AA.
ABU63698
XX
AC
XX

Rat; apoptosis; fetuin; cancer; alpha-2-Human serum glycoprotein; alpha-2-HS glycoprotein; fetal protein; tissue remodelling; cell death; embryonic development; supercharged zinc alpha 2-HS glycoprotein; HT-29; colon cancer; LNCaP; prostate cancer; Hep G2; Hepatoma; cytosatic; cytostatic; Rat fetuin apoptosis-inducing peptide fragment.

Rattus sp.
apoptosis inducer.

PN	US2003087809-A1.
XX	
PD	08-MAY-2003.
XX	
PF	08-OCT-2002 ; 2002US-00267706.
XX	
PR	18-DEC-1997 ; 97US-00993432.
PR	08-SEP-1998 ; 98US-00149878.
PR	07-OCT-1999 ; 99US-00414136.
PR	09-JUL-2001 ; 2001US-00902208.
PR	14-MAY-2002 ; 2002US-00145682.
XX	
PA	(TSAI/) TSAI D.

Tsai D;
WPI; 2003-567578/53.
Process for inducing apoptosis in cancer cells involves use of alpha-2-
human serum glycoprotein or its peptide fragment.
Disclosure; Page 11; 27pp; English.

The invention discloses a method for the induction of apoptosis in cancer cells which involves the administration of alpha-2-Human serum (HS) glycoprotein or its peptide fragment to the cancer cells. Alpha-2-HS glycoprotein is a homologue of bovine fetuin, which is a mainly foetal protein and has been shown to control tissue remodelling and physiological cell death during embryonic development, suggesting that it may contain an activity for inducing apoptosis. Methods are also disclosed for the preparation of supercharged zinc alpha-2-HS glycoprotein from alpha 2-HS glycoprotein, which exhibited an increased apoptotic activity. The method is used for inducing apoptosis in cancer cells and treating the cancer. The alpha-2-HS, which has been overloaded with zinc, as well as its fragments, exhibits selectivity for inducing apoptosis in HT-29 (colon cancer), LNCap (prostate cancer) and Hep G2 (Hepatoma) cells, and does not affect C3T18 CO (normal colon) cells. The sequence presented is the rat fetuin apoptosis-inducing peptide fragment

Sequence 10 AA:		Query Match		Score 46 ; DB 6 ; Length 10 ;	
Best Local Matches	Similarity	Prod. No.	Mismatches	Indels	Gaps
9 ; Conservative	93.9% ; 90.0%	0.01.1 ; 1;	0 ; 0	0 ; 0	0

QY	1	HSFGYWASVE	10
	:		
Db	1	HTFSGYASVE	10

XX 18-DEC-1997; 97US-00993432.
 PR 08-SEP-1998; 98US-00149878.
 PR 07-OCT-1999; 99US-00414136.
 PR 09-JUL-2001; 2001US-00902208.
 PR 14-MAY-2002; 2002US-00145682.
 XX PA (TSAI/) TSAI D.
 XX PI
 XX DR WPI; 2003-567578/53.
 XX PT Process for inducing apoptosis in cancer cells involves use of alpha-2-HS human serum glycoprotein or its peptide fragment.
 XX Disclosure; Page 10; 27pp; English.
 XX Disclosure; Page 11; 27pp; English.
 XX Disclosure; Page 11; 27pp; English.
 PS The invention discloses a method for the induction of apoptosis in cancer cells which involves the administration of alpha-2-Human serum (HS) glycoprotein or its peptide fragment to the cancer cells. Alpha-2-HS glycoprotein is a homologue of bovine fetuin, which is a mainly foetal protein and has been shown to control tissue remodelling and physiological cell death during embryonic development, suggesting that it may contain an activity for inducing apoptosis. Methods are also disclosed for the preparation of supercharged zinc alpha-2-HS glycoprotein from alpha-2-HS Glycoprotein, which exhibited an increased apoptotic activity. The method is used for inducing apoptosis in cancer cells and treating the cancer. The alpha-2-HS, which has been overloaded with zinc, as well as its fragments, exhibits selectivity for inducing apoptosis in HT-29 (colon cancer), LNCAP (prostate cancer) and Hep G2 (Hepatoma) cells, and does not affect CED18 CO (normal colon) cells. The sequence presented is the bovine fetuin apoptosis-inducing peptide fragment presented in the sheep fetuin apoptosis-inducing peptide sequence.
 CC Query Match 93.9%; Score 46; DB 6; Length 10;
 CC Best Local Similarity 90.0%; Pred. No. 0.011; Mismatches 1; Indels 0; Gaps 0;
 CC SQ Sequence 10 AA;
 CC Query Match 93.9%; Score 46; DB 6; Length 10;
 CC Best Local Similarity 90.0%; Pred. No. 0.011; Mismatches 1; Indels 0; Gaps 0;
 CC SQ Sequence 10 AA;
 CC Query Match 93.9%; Score 46; DB 6; Length 10;
 CC Best Local Similarity 90.0%; Pred. No. 0.011; Mismatches 1; Indels 0; Gaps 0;
 CC SQ Sequence 10 AA;

Query 1 HSFSGVAVSE 10
 1 :|||||||
 1 HTFSGVAVSE 10

RESULT 6
 ABU08898 ABU08898 standard; Peptide; 10 AA.
 XX AC ABU08898;
 XX DT 11-Oct-2003 (first entry)
 XX DE Bovine fetuin apoptosis-inducing peptide fragment #1.
 XX DS Bovine; cow; apoptosis; fetuin; cancer; alpha-2-Human serum glycoprotein; alpha-2-HS Glycoprotein; foetal protein; tissue remodelling; cell death; embryonic development; supercharged zinc alpha-2-HS Glycoprotein; HT-29; colon cancer; LNCaP; prostate cancer; Hep G2; Hepatoma; cytostatic; apoptosis inducer.
 XX OS Bos sp.
 XX PN US2003087809-A1.
 XX PD 08-MAY-2003.
 XX PR 08-OCT-2002; 2002US-00267706.
 XX PR 18-DEC-1997; 97US-00993432.
 XX PR 08-SEP-1998; 98US-00149878.
 XX PR 07-OCT-1999; 99US-00414136.
 XX PR 09-JUL-2001; 2001US-00902208.
 XX PA (TSAI/) TSAI D.

PR 09-JUL-2001; 2001US-00902208.
 PR 14-MAY-2002; 2002US-00145682.
 XX PA (TSAI/) TSAI D.
 XX PI
 XX DR WPI; 2003-615747/58.

XX New compound comprising peptide fragment derived from specially prepared PT zinc-charged bovine fetuin, useful for treating colon and prostate PR cancer, by causing apoptosis in colon and prostate cancer cells.
 PT XX
 PR PS Claim 1; Page 13; 20pp; English.

CC The invention relates to a compound for treatment of colon and prostate cancer produced from a peptide fragment derived from specially prepared CC zinc-charged bovine fetuin, where the peptide fragment corresponds to CC amino acid residues 300-309 of fetuin (referred to as fetuin peptide CC fragment (PPF 300-309)), and human or mouse peptides that correspond to CC PPF 300-309. The human PPF causes apoptosis in colon cancer cells and CC prostate cancer cells. The invention also relates to preparing a CC polypeptide having apoptotic activity isolated from fetuin comprising CC incubating fetuin in solution with a chelating agent, isolating naked CC fetuin, incubating the naked fetuin in solution with zinc, isolating zinc CC charged fetuin from the solution, drying the zinc charged fetuin, CC dissolving the dried zinc charged fetuin in water to form a solution and CC isolating from the solution the filtrates that have been predetermined to CC have apoptotic activity in cancer cells. The compound is useful for CC treating prostate or colon cancer by inducing apoptosis of the cancerous CC cells. This sequence represents a rat fetuin fragment of the invention.
 CC XX
 SQ Sequence 10 AA;

Query Match 93.9%; Score 46; DB 6; Length 10;
 Best Local Similarity 90.0%; Pred. No. 0.011;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

RESULT 9
 ID ADA26732 standard; peptide; 10 AA.
 AC ADA26732;
 AC AC
 AC DT 20-NOV-2003 (first entry)
 AC DB Sheep fetuin peptide fragment (PPF).
 AC XX KW Sheep; colon cancer; prostate cancer; zinc-charged bovine fetuin; fetuin;
 AC KW fetuin peptide fragment; PPF; apoptosis.
 AC XX OS Ovis aries.
 AC PN US2003027767-A1.
 AC XX PD 06-FEB-2003.
 AC XX PP 14-MAY-2002; 2002US-00145682.

RESULT 8
 ID ADA26733 standard; peptide; 10 AA.
 AC ADA26733;
 AC AC
 AC DT 20-NOV-2003 (first entry)
 AC DE Rat fetuin peptide fragment (PPF).
 AC XX KW Rat; colon cancer; prostate cancer; zinc-charged bovine fetuin; fetuin;
 AC KW fetuin peptide fragment; PPF; apoptosis.
 AC OS Rattus sp.
 AC XX US2003027767-A1.
 AC PN PR 18-DEC-1997; 97US-00993432.
 AC PD PR 08-SEP-1998; 98US-00149878.
 AC XX PR 07-OCT-1999; 99US-00414136.
 AC PR 09-JUL-2001; 2001US-00902208.
 AC PA (TSAI /) TSAI D.
 AC XX PI Tsai D;
 AC XX DR WPI; 2003-615747/58.

XX New compound comprising peptide fragment derived from specially prepared PT zinc-charged bovine fetuin, useful for treating colon and prostate PR cancer, by causing apoptosis in colon cancer and prostate cancer cells.
 PR XX
 PR PS Example; Page 11; 20pp; English.

XX The invention relates to a compound for treatment of colon and prostate cancer produced from a peptide fragment derived from specially prepared CC zinc-charged bovine fetuin, where the peptide fragment corresponds to CC amino acid residues 300-309 of fetuin (referred to as fetuin peptide CC fragment (PPF 300-309)), and human or mouse peptides that correspond to CC PPF 300-309. The human PPF causes apoptosis in colon cancer cells and CC prostate cancer cells. This sequence represents a rat fetuin fragment of the invention.
 CC XX
 SQ Sequence 10 AA;
 Query Match 93.9%; Score 46; DB 6; Length 10;
 Best Local Similarity 90.0%; Pred. No. 0.011;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

RESULT 9
 ID ADA26732 standard; peptide; 10 AA.
 AC ADA26732;
 AC AC
 AC DT 20-NOV-2003 (first entry)
 AC DB Sheep fetuin peptide fragment (PPF).
 AC XX KW Sheep; colon cancer; prostate cancer; zinc-charged bovine fetuin; fetuin;
 AC KW fetuin peptide fragment; PPF; apoptosis.
 AC OS Ovis aries.
 AC PN US2003027767-A1.
 AC XX PD 06-FEB-2003.
 AC XX PP 14-MAY-2002; 2002US-00145682.

XX New compound comprising peptide fragment derived from specially prepared PT zinc-charged bovine fetuin, useful for treating colon and prostate PR cancer, by causing apoptosis in colon cancer and prostate cancer cells.
 PR XX
 PR PS Example; Page 11; 20pp; English.

XX The invention relates to a compound for treatment of colon and prostate cancer produced from a peptide fragment derived from specially prepared CC zinc-charged bovine fetuin, where the peptide fragment corresponds to CC amino acid residues 300-309 of fetuin (referred to as fetuin peptide CC fragment (PPF 300-309)), and human or mouse peptides that correspond to CC PPF 300-309. The human PPF causes apoptosis in colon cancer cells and CC prostate cancer cells. This sequence represents a rat fetuin fragment of the invention.
 CC XX

CC prostate cancer cells. The invention also relates to preparing a
 CC polypeptide having apoptotic activity isolated from fetuin comprising
 CC fetuin in solution with a chelating agent, isolating naked
 CC fetuin, incubating the naked fetuin in solution with zinc, isolating zinc
 CC charged fetuin from the solution, drying the zinc charged fetuin,
 CC dissolving the dried zinc charged fetuin in water to form a solution and
 CC isolating from the solution the filtrates that have been predetermined to
 CC have apoptotic activity in cancer cells. The compound is useful for
 CC treating prostate or colon cancer by inducing apoptosis of the cancerous
 CC cells. This sequence represents a sheep fetuin fragment of the invention.
 XX Sequence 10 AA;

Query Match 93.9%; Score 46; DB 6; Length 10;

Best Local Similarity 90.0%; Pred. No. 0.011; Mismatches 0; Indels 0; Gaps 0;
 Matches 9; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
 :|||||||
 Db 1 HTFGVAVSE 10

RESULT 10

ADV44760

ID ADV44760 standard; peptide; 10 AA.

XX
 AC ADV44760;
 XX
 XX 10-MAR-2005 (first entry)

DB Bovine fetuin fragment FPF 300-09 SEQ ID NO:1.

KW fetuin; colon tumor; prostate tumor; neoplasm; apoptosis; cytostatic;
 KW protein therapy.

XX OS Rattus sp.

XX PN US2004259800-A1.

XX PD 23-DEC-2004.

XX PP 05-FEB-2004; 2004US-00772537.

XX PR 18-DEC-1997; 97US-00993432.
 PR 08-SEP-1998; 98US-00149878.
 PR 07-OCT-1998; 99US-0014136.

PR 09-JUL-2001; 2001US-00902208.
 PR 14-MAY-2002; 2002US-00145682.

XX PA (TSAI/) TSAI D.

XX PI Tsai D;

XX DR WPI; 2005-038780/04.

XX PT New compound or fetuin polypeptides useful for treating colon and
 prostate cancer by causing apoptosis in colon and prostate cancer cells,

PT thus offering a breakthrough in cancer therapy.

XX PS Example 7; SEQ ID NO 6; 20pp; English.

XX CC The invention relates to a novel compound or fetuin polypeptides for the
 CC treatment of colon and prostate cancer, where the polypeptide causes
 CC apoptosis in colon and prostate cancer cells. A compound or peptide of
 CC the invention has cytostatic activity, and may have a use in protein
 CC therapy. The fetuin polypeptides are useful for treating colon and
 CC prostate cancer, thus offering a breakthrough in cancer therapy. The
 CC present sequence represents the rat fetuin peptide fragment (FPF) 300-09,
 CC amino acids 300-309 of the full-length fetuin polypeptide.

XX SQ Sequence 10 AA;

Query Match 93.9%; Score 46; DB 9; Length 10;

Best Local Similarity 90.0%; Pred. No. 0.011; Mismatches 1; Indels 0; Gaps 0;
 Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
 :|||||||
 Db 1 HTFGVAVSE 10

RESULT 12

ADV44764

ID ADV44764 standard; peptide; 10 AA.

XX AC ADV44764;

XX SQ Sequence 10 AA;

Query Match 93.9%; Score 46; DB 9; Length 10;

DT 10-MAR-2005 (first entry)
 XX Ovine fetuin fragment FPF 300-09 SEQ ID NO:5.
 DE XX
 KW fetuin; colon tumor; prostate tumor; neoplasm; apoptosis; cytostatic;
 protein therapy.
 KW XX
 KW XX
 OS Ovis aries.
 XX PN US2004259800-A1.
 XX DR WPI; 2003-569290/53.
 XX
 PD 23-DEC-2004.
 XX PR 05-FEB-2004; 2004US-00772537.
 XX PR 18-DEC-1997; 97US-00994432.
 PR 08-SEP-1998; 98US-00149878.
 PR 07-OCT-1999; 99US-00414136.
 PR 09-JUL-2001; 2001US-00902208.
 PR 14-MAY-2002; 2002US-00145682.
 PA (TSAI /) TSAI D.
 PA DR WPI; 2005-038780/04.
 PT New compound or fetuin polypeptides useful for treating colon and prostate cancer cells,
 PT thus offering a breakthrough in cancer therapy.
 PT XX
 PS Example 7; SEQ ID NO 5; 20pp; English.
 XX
 CC The invention relates to a novel compound or fetuin polypeptides for the
 CC treatment of colon and prostate cancer, where the polypeptide causes
 CC apoptosis in colon and prostate cancer cells. A compound or peptide of
 CC the invention has cytostatic activity, and may have a use in protein
 CC therapy. The fetuin polypeptides are useful for treating colon and
 CC prostate cancer, thus offering a breakthrough in cancer therapy. The
 CC present sequence represents the ovine fetuin peptide fragment (FPF) 300-
 CC 09, amino acids 300-309 of the full-length fetuin polypeptide.
 XX SQ Sequence 10 AA;
 CC The invention relates to a novel compound or fetuin polypeptides for the
 CC treatment of colon and prostate cancer, where the polypeptide causes
 CC apoptosis in colon and prostate cancer cells. A compound or peptide of
 CC the invention has cytostatic activity, and may have a use in protein
 CC therapy. The fetuin polypeptides are useful for treating colon and
 CC prostate cancer, thus offering a breakthrough in cancer therapy. The
 CC present sequence represents the ovine fetuin peptide fragment (FPF) 300-
 CC 09, amino acids 300-309 of the full-length fetuin polypeptide.

SQ Sequence 10 AA;

Query Match 93.9%; Score 46; DB 9; Length 10;
 Best Local Similarity 90.0%; Pred. No. 0.011; Indels 0; Gaps 0;

Qy 1 HSFSGVAVSE 10
 1 :|:||| | | | |
 Db 1 HTFSGVAVSE 10

RESULT 1.3
 AEA78929
 ID AEA78929 standard; peptide; 18 AA.
 XX
 AC AEA78929;
 XX DT 11-AUG-2005 (first entry)
 XX DE Bovine Serum Albumin indexed peptide database peptide #145.
 XX KW mass spectrometry; peptide index; protein identification;
 KW protein quantitation; proteomics; bioinformatics; genomics;
 KW proteomics; genomics; bioinformatics; Bovine Serum Albumin.
 XX OS Bos sp.
 XX PN WO2003034549-A2.
 XX PD 03-JUL-2003.

PP 09-DEC-2002; 2002WO-GB005571.
 XX PR 08-DEC-2001; 2001US-034060P.
 PR 14-MAR-2002; 2002US-0364847P.
 PA (MICR-) MICROMASS LTD.
 XX PI Geromanos S, Dongre A, Opiteck G, Silva J;
 XX DR WPI; 2003-569290/53.
 XX
 PT A method of mass spectrometry, useful in protein identification and
 PR quantitation, by mass analyzing the first molecules in the first mixture
 PT and accurately determining the mass to charge ratio of the first
 PR molecules in the first mixture.
 XX Disclosure; FIG 9B; 123pp; English.
 XX
 PS The invention relates to a novel method of mass spectrometry. The method
 CC comprises mass analyzing the first molecules in a first mixture and
 CC accurately determining the mass to charge ratio of the first molecules in
 CC the first mixture. The invention further relates to: generating an index
 CC for use in identifying molecules of biological origin by mass
 CC spectrometry by accurately determining the masses or mass to charge
 CC ratios of molecules comprising peptides resulting from the digestion or
 CC fragmentation of a polypeptide or protein; determining a first physico-
 CC chemical property other than mass or mass to charge ratio of the
 CC molecules comprising peptides; and optionally determining a second,
 CC third, fourth and/or fifth physico-chemical property of the molecules
 CC comprising peptides; and a mass spectrometer comprising a mass analyser
 CC for accurately determining the mass to charge ratio of the first
 CC molecules, and means for identifying the first molecules on the basis of
 CC at least the first physico-chemical property and the accuracy of
 CC determined mass to charge ratio of the first molecules and optionally on
 CC the basis of the second, third, fourth and/or fifth physico-chemical
 CC property. The method and spectrometer are useful in protein
 CC identification, protein quantitation, proteases, high-resolution mass
 CC spectrometry, proteomics, genomics and bioinformatics. This sequence
 CC represents a peptide from an indexed peptide database created by the
 CC novel mass spectrometry method of the invention.
 XX SQ Sequence 18 AA;

Query Match 93.9%; Score 46; DB 7; Length 18;
 Best Local Similarity 90.0%; Pred. No. 0.021; Indels 0; Gaps 0;
 Matches 9; Conservative 1; Mismatches 0; DB 1 HSFSGVAVSE 10
 1 :|:||| | | | |
 1 HTFSGVAVSE 10

RESULT 14
 AAB30555
 ID AAB30555 standard; peptide; 341 AA.
 XX AC AAB30555;
 XX DT 06-MAR-2001 (first entry)
 XX DS Amino acid sequence of an alpha-2HS-glycoprotein fragment.
 KW Human; alpha-2HS-glycoprotein; alpha-2HS; fetuin; alpha-2Z-globulin;
 KW plasma glycoprotein; antiinflammatory; tissue damage; ischemia; stroke;
 KW myocardial infarction.
 XX OS Bos sp.
 XX PN WO200060943-A1.
 XX PD 19-OCT-2000.
 XX PP 13-APR-2000; 2000WO-US010002.

XX 13-APR-1999; 9US-012928P.
 PR (PICO-) PICOWER INST MEDICAL RES.
 XX PI Tracey KJ, Wang H;
 XX DR WPI; 2001-006853/01.
 XX Novel methods for treating tissue ischemia or inhibiting tissue damage associated with ischemia, of the brain and heart in a subject involves administering human alpha 2HS-glycoprotein.
 XX Disclosure; Page 12-13; 22pp; English.
 PS Sequence 341 AA;

CC The present sequence represents a fragment of the bovine alpha-2HS-glycoprotein (alpha-2HS) (HS not defined). The polypeptide is also known as fetuin, alpha-2Z-globulin. The polypeptide is a plasma glycoprotein. Alpha-2HS is a major protein occurring in human blood and calciferous tissues. The polypeptide has an antiinflammatory activity potentiator. It is used for treating or inhibiting tissue damage caused by ischemia which is manifest as stroke or as myocardial infarction. Administration of alpha-2HS was found to suppress production of tumour necrosis factor (TNF).
 XX Sequence 341 AA;

Query Match Score 46; DB 4; Length 341;
 Best Local Similarity 90.0%; Pred. No. 0.56;
 Matches 9; Conservative 1; Mismatches 0; Gaps 0;

QY 1 HSFGVAVSE 10
 Db 295 HTFGVAVSE 304

RESULT 15
 AAW61491 ID AAW61491 standard; protein; 359 AA.
 XX AC AAW61491;
 XX DT 21-OCT-1998 (first entry)
 XX DE Human fetuin glycoprotein type 1.
 XX fetuin; anti-inflammatory; guanyl-hydrazone; glycosylated; cytokine;
 KW alpha 2-HS glycoprotein.
 XX Homo sapiens.
 XX WO9830583-A1.
 XX PD 16-JUL-1998.
 XX FP 08-JAN-1998; 98WO-US000390.
 XX PR 08-JAN-1997; 97US-00780311.
 PA (PICO-) PICOWER INST MEDICAL RES.
 XX PI Tracey KJ, Wang H;
 OS DR WPI; 1998-39905/34.
 XX PT Complex or combination of guanyl-hydrazone compound - with glycosylated polypeptide, especially fetuin, providing enhanced anti-inflammatory activity.
 PS Disclosure; Page 18; 38pp; English.
 XX CC The invention relates to a novel complex which comprises a glycosylated peptide selected from mammalian fetuin and/or alpha 2-HS glycoprotein,

XX and a therapeutic aromatic or heterocyclic guanyl hydrazone, which is positively charged at physiological pH. The complex has anti-inflammatory activity, based on suppression of pro-inflammatory cytokine synthesis in activated macrophages and other cells (e.g. suppression of TNF-alpha synthesis in LPS-activated macrophages). The presence of fetuin as a drug complex or in combination with the therapeutically active small molecule compound enhances therapeutic activity of the small molecule compound.
 CC The present invention further provides a means for screening for therapeutically active small molecule compounds by means of binding to fetuin. The present sequence represents human fetuin glycoprotein
 SQ Sequence 359 AA;

Query	Match	Score	DB	Length	Best Local Similarity	Pred. No.	Mismatches	Indels	Gaps
		46	2	359	90.0%	0.59	0	0	0

QY 1 HSFGVAVSE 10
 Db 313 HTFGVAVSE 322

RESULT 16
 AAY07247 ID AAY07247 standard; peptide; 359 AA.
 XX AC AAY07247;
 XX DT 06-JUL-1999 (first entry)
 XX DB Human fetuin polypeptide #1.
 XX KW Human; fetuin; foetal plasma glycoprotein; miscarriage; pregnancy; pre-term labour; tumour necrosis factor; TNF; secretion; spermine; mononuclear cell; spontaneous abortion.

OS Homo sapiens.
 XX WO9913897-A1.
 PN XX 25-MAR-1999.
 PD XX 18-SEP-1998; 98WO-US019579.
 PR XX 18-SEP-1997; 97US-00932871.
 PA (PICO-) PICOWER INST MEDICAL RES.
 XX PI Tracy KJ, Wang H;
 XX DR WPI; 1999-229402/19.
 XX PS Claim 2; Page 5; 9pp; English.
 XX This sequence represents a human fetuin polypeptide, a foetal plasma glycoprotein, which is used to help prevent miscarriages during pregnancy, and for treating pre-term labour during pregnancy. Fetuin acts by suppressing tumour necrosis factor (TNF) secretion by spermine. TNF is secreted by mononuclear cells, and increased levels result in spontaneous abortion.
 XX SQ Sequence 359 AA;

Query	Match	Score	DB	Length	Best Local Similarity	Pred. No.	Mismatches	Indels	Gaps
		46	2	359	90.0%	0.59	0	0	0

QY 1 HSFGVAVSE 10
 Db 313 HTFGVAVSE 322

RESULT 17
ID AAY55990 standard; protein; 359 AA.
XX
AC AAY55990;
XX
DT 08-NPY-2000 (first entry)
DE Bovine fetuin polypeptide.
XX
KW Glial Growth Factor 2; GGF2; protein expression; fetuin; bovine.
XX
OS Bos sp.
XX
Key Location/Qualifiers
FT 1..18
Peptide /note= "signal peptide"
FT
Protein
FT /note= "mature protein"
FT
NN WO200006713-A2.
XX
PD 10-FEB-2000.
XX
PP 08-JUL-1999; 99WO-US015367.
XX
PR 28-JUL-1998; 98US-00124605.
XX
(PARB) BAYER CORP.
XX
PI Chan SY, Tran V, Cheng S;
XX
DR WPI; 2000-195287/17.
DR N-PDB; AA256932.
XX
PT Method for isolating a desired protein from a mammalian host cell, using an expression vector containing a fetuin gene, useful for production of Glial Growth Factor 2.
XX
PS Example 1: Page 30-32; 40pp; English.
XX
The invention relates to methods and constructs for protein expression, in particular, the expression of Glial Growth Factor 2 (GGF2). The method comprises transforming a mammalian host cell with an expression vector containing an expressible mammalian fetuin gene and transforming the same mammalian host cell with an expression vector containing an expressible gene which encodes the desired protein, culturing the transformed host cells and isolating the desired protein. The present sequence represents a bovine fetuin polypeptide.
XX
Sequence 359 AA;
Query Match 1 HSESGVAVSE 10
Best Local Similarity 93.9%; Score 46; DB 3; Length 359;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 HSESGVAVSE 10
Db 313 HTESGVAVSE 322

RESULT 18
ID ABB78019 standard; protein; 359 AA.
XX
AC ABB78019;
XX
DT 22-OCT-2002 (first entry)
DE Bovine alpha2-Heremans Schmid Glycoprotein (AHSG).
XX

Human; alpha2-Heremans Schmid Glycoprotein; AHSG; chromosome 3q27; insulin; autophosphorylation; insulin receptor; insulin sensitivity; insulin receptor tyrosine kinase; IR-TK; insulin resistance; body weight; body fat.
KW obesity; insulin resistance; body weight; body fat.
XX
OS Bos sp.
XX
Key Location/Qualifiers
FT 1..18
Peptide /note= "signal peptide"
XX
NN WO200239923-A2.
XX
PD 23-MAY-2002.
XX
PP 29-OCT-2001; 2001WO-US042832.
XX
PR 27-OCT-2000; 2000US-0243442P.
XX
PA (UWYA-) UNIV WAYNE STATE.
XX
PI Grunberger G, Mathews ST, Jen KC, Goustin AS, Srinivas PR;
XX
DR WPI; 2002-590447/63.
XX
PT Inhibiting alpha 2-Heremans Schmid Glycoprotein activity, augmenting phosphorylation/tyrosine kinase activity of insulin receptors, or treating obesity and insulin resistance, by inhibiting AHSG activity in cells.
XX
PS Claim 9; Page 14-15; 70pp; English.
XX
The present sequence represents a bovine alpha2-Heremans Schmid Glycoprotein (AHSG). The human Ahsg gene is located on chromosome 3q27. AHSG inhibits insulin-induced autophosphorylation of the insulin receptor and insulin receptor tyrosine kinase (IR-TK) activity. Genetic ablation of the Ahsg gene enhances insulin signal transduction and increases whole body insulin sensitivity. The phosphorylation status of AHSG is critical for IR-TK inhibition. The human AHSG protein exists in 2 variant forms. Variant AHSG-1 (ABB7014) has a Thr at position 248 and Thr at position 256. Variant AHSG-2 (ABB78015) has a Met at position 248 and Ser at position 256. Inhibition of AHSG activity in a cell augments phosphorylation or tyrosine kinase activity of insulin receptors in liver/muscle cell. AHSG modulators can therefore be used for treating obesity and insulin resistance, increasing insulin sensitivity, preventing/diminishing effect of high-fat diet on body weight gain, or lowering total body fat content.
XX
SQ Sequence 359 AA;
Query Match 1 HSESGVAVSE 10
Best Local Similarity 93.9%; Score 46; DB 5; Length 359;
Matches 9; Conservative 1; Mismatches 0; Indels 0; Gaps 0;
Qy 1 HSESGVAVSE 10
Db 313 HTESGVAVSE 322

RESULT 19
ID ABU63699 standard; peptide; 10 AA.
XX
AC ABU63699;
XX
DT 11-OCT-2003 (first entry)
XX
DE Mouse fetuin apoptosis-inducing peptide fragment.
XX
KW apoptosis; fetuin; cancer; alpha-2-Human serum glycoprotein;
KW alpha-2-HS glycoprotein; foetal protein; tissue remodelling; cell death;
KW embryonic development; supercharged zinc alpha 2-HS glycoprotein; HT-29;
KW colon cancer; LNCap; prostate cancer; Hep G2; Hepatoma; cytostatic;

KW apoptosis inducer.
 XX PF 14-MAY-2002; 2002US-00145682.
 CS PR 18-DEC-1997; 97US-0093432.
 XX PR 08-SEP-1998; 98US-00149878.
 PN PR 07-OCT-1999; 99US-0014136.
 XX PR 09-JUL-2001; 2001US-00902208.
 PD XX PA (TSAI/) TSAI D.

XX PI Tsai D;
 XX DR WPI; 2003-615747/58.

XX PT New compound comprising peptide fragment derived from specially prepared
 XX PR zinc-charged bovine fetuin, useful for treating colon and prostate
 XX PR cancer, by causing apoptosis in colon cancer and prostate cancer cells.
 PA (TSAI/) TSAI D.

XX PS Claim 2; Page 13; 20pp; English.

XX CC The invention relates to a compound for treatment of colon and prostate
 CC cancer produced from a peptide fragment derived from specially prepared
 CC zinc-charged bovine fetuin, where the peptide fragment corresponds to
 CC amino acid residues 300-309 of fetuin (referred to as fetuin peptide
 CC fragment (PPF 300-309)), and human or mouse peptides that correspond to
 CC PPF 300-309. The human PPF causes apoptosis in colon cancer cells and
 CC prostate cancer cells. The invention also relates to preparing a
 CC polypeptide having apoptotic activity isolated from fetuin comprising
 CC incubating fetuin in solution with a chelating agent, isolating naked
 CC zinc, isolating the naked fetuin in solution with zinc, isolating zinc
 CC charged fetuin from the solution, drying the zinc charged fetuin,
 CC dissolving the dried zinc charged fetuin in water to form a solution and
 CC isolating from the solution the filtrates that have been predetermined to
 CC have apoptotic activity in cancer cells. The compound is useful for
 CC treating prostate or colon cancer by inducing apoptosis of the cancerous
 CC cells. This sequence represents a mouse fetuin fragment of the invention.
 XX SQ Sequence 10 AA;

Query Match 77.6%; Score 38; DB 6; Length 10;
 Best Local Similarity 80.0%; Pred. No. 0.51;
 Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 OS 0;

XX Qy 1 HSFSGVAVSE 10
 Db 1 HAFSPVAVSE 10

RESULT 21
 ID ADV44766 standard; peptide; 10 AA.
 XX AC ADV44766;
 XX DT 10-MAR-2005 (first entry)
 DB Murine fetuin fragment PPF 300-09 SEQ ID NO:7.
 XX KW fetuin; colon tumor; prostate tumor; neoplasm; apoptosis; cytostatic;
 KW protein therapy.
 XX OS Mus sp.
 XX PN US2004252800-A1.
 PR 18-DEC-1997; 97US-0093432.
 XX PR 08-SEP-1998; 98US-00149878.
 PN PR 07-OCT-1999; 99US-0014136.
 XX PR 09-JUL-2001; 2001US-00902208.
 PD 06-FEB-2003.

RESULT 20
 ID ADA26734
 XX ADA26734 standard; peptide; 10 AA.
 AC ADA26734;
 XX DT 20-NOV-2003 (first entry)
 XX DE Mouse fetuin peptide fragment (PPF).
 XX KW Mouse; colon cancer; prostate cancer; zinc-charged bovine fetuin; fetuin;
 KW fetuin peptide fragment; PPF; apoptosis.
 XX CS Mus sp.
 XX US2003027767-A1.
 PN PR 06-FEB-2003.

PR 14-MAY-2002; 2002US-00145682.
 XX
 PA (TSAI /) TSAI D.
 XX
 PI Tsai D;
 XX
 ID WPI; 2005-038780/04.
 PT New compound or fetuin polypeptides useful for treating colon and prostate cancer by causing apoptosis in colon and prostate cancer cells, thus offering a breakthrough in cancer therapy.
 PT
 PS Claim 11; SEQ ID NO 7; 20pp; English.
 XX
 CC The invention relates to a novel compound or fetuin polypeptides for the treatment of colon and prostate cancer, where the polypeptide causes apoptosis in colon and prostate cancer cells. A compound or peptide of the invention has cytostatic activity, and may have a use in protein therapy. The fetuin polypeptides are useful for treating colon and prostate cancer, thus offering a breakthrough in cancer therapy. The present sequence represents the murine fetuin peptide fragment (PFP) 300-09, amino acids 300-309 of the full-length fetuin polypeptide.
 CC
 XX Sequence 10 AA;
 SQ Query Match 77.6%; Score 38; DB 9; Length 10;
 Best Local Similarity 80.0%; Pred. No. 0.51;
 Matches 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1 HSPGVASVE 10
 | :| | |||||
 Db 1 HAFSPVAVSE 10
 SQ Sequence 10 AA;
 Query Match 77.6%; Score 38; DB 9; Length 10;
 Best Local Similarity 80.0%; Pred. No. 0.51;
 Matches 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1 HSPGVASVE 10
 | :| | |||||
 Db 1 HAFSPVAVSE 10
 SQ Sequence 10 AA;
 Query Match 77.6%; Score 38; DB 5; Length 346;
 Best Local Similarity 80.0%; Pred. No. 28;
 Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;
 QY 1 HSFGVASVE 10
 | :| | |||||
 Db 303 HAFSPVAVSE 312
 SQ Sequence 10 AA;
 RESULT 23
 ABB78018
 ID ABB78018 standard; Protein; 352 AA.
 XX
 AC ABB78018;
 DT 22-OCT-2002 (first entry)
 XX Rat alpha2-Heremans Schmid Glycoprotein (AHSG).
 DE
 XX Human; alpha2-Heremans Schmid Glycoprotein; AHSG; chromosome 3q27;
 KW insulin; autophosphorylation; insulin receptor; insulin sensitivity;
 KW insulin receptor tyrosine kinase; IR-TK; insulin signal transduction;
 KW obesity; insulin resistance; body weight; body fat.
 OS Rattus sp.
 XX PN WO200239923-A2.
 XX PD 23-MAY-2002.
 AC ABB78017;
 XX DT 22-OCT-2002 (first entry)
 XX Murine alpha2-Heremans Schmid Glycoprotein (AHSG).
 KW Human; alpha2-Heremans Schmid Glycoprotein; AHSG; chromosome 3q27;
 KW insulin; autophosphorylation; insulin receptor; insulin sensitivity;
 KW insulin receptor tyrosine kinase; IR-TK; insulin signal transduction;
 KW obesity; insulin resistance; body weight; body fat.
 OS Mus sp.
 XX PR 27-OCT-2000; 2000US-0243442P.
 XX PA (UWYA-) UNIV WAYNE STATE.
 XX PD 23-MAY-2002.
 XX PR 29-OCT-2001; 2001WO-US042832.
 XX PI Grunberger G, Mathews ST, Jen KC, Goustin AS, Srinivas PR;
 XX DR 2002-590447/63.
 XX PR Inhibiting alpha 2-Heremans Schmid Glycoprotein activity, augmenting phosphorylation/tyrosine kinase activity of insulin receptors, or treating obesity and insulin resistance, by inhibiting AHSG activity in cells.
 XX
 PS Claim 9; Page 14; 70pp; English.
 XX
 CC The present sequence represents a rat alpha2-Heremans Schmid Glycoprotein (AHSG). The human AHSG gene is located on chromosome 3q27. AHSG inhibits insulin-induced autophosphorylation of the insulin receptor and insulin receptor tyrosine kinase (IR-TK) activity. Genetic ablation of the Ahsg gene enhances insulin signal transduction and increases whole body insulin sensitivity. The phosphorylation status of AHSG is critical for IR-TK inhibition. The human AHSG protein exists in 2 variant forms. Variant AHSG*1 (ABB7014) has a Thr at position 248 and Thr at position 256. Variant AHSG*2 (ABB78015) has a Met at position 248 and Ser at position 256. Inhibition of AHSG activity in a cell augments phosphorylation or tyrosine kinase activity of insulin receptors in liver/muscle cell. AHSG modulators can therefore be used for treating obesity and insulin resistance, increasing insulin sensitivity, preventing/diminishing effect of high-fat diet on body weight gain, or lowering total body fat content.

CC position 256. Inhibition of AHSG activity in a cell augments
 CC phosphorylation or tyrosine kinase activity of insulin receptors in
 CC liver/muscle cell. AHSG modulators can therefore be used for treating
 CC obesity and insulin resistance, increasing insulin sensitivity,
 CC preventing/diminishing effect of high-fat diet on body weight gain, or
 CC lowering total body fat content

XX Sequence 352 AA:

Query Match 77.6%; Score 38; DB 5; Length 352;
 Best Local Similarity 80.0%; Pred. No. 28;
 Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

SQ

1 HSFSGVAVSE 10

Db 306 HAFSPVAVSE 315

Qy :

1 :|:|||:|||

Db 306 HAFSPVAVSE 315

RESULT 25

ID ADF30521 standard; protein: 352 AA.

XX

AC ADD48974;

XX

DT 02-DEC-2004 (revised)

XX

DE Rat Protein A32227, SEQ ID NO 14686.

XX

KW Rat; pain; neuronal tissue; gene therapy; spinal segmental nerve injury;

XX

KW chronic constriction injury; CCI; spared nerve injury; SNI; Chung.

XX

OS Rattus norvegicus.

OS Unidentified.

XX

PN WO2003016475-A2.

XX

PD 27-FEB-2003.

XX

PF 14-AUG-2002; 2002WO-US025765.

XX

PR 14-AUG-2001; 2001US-03112147P.

XX

PR 01-NOV-2001; 2001US-034638P.

XX

PR 26-NOV-2001; 2001US-0333347P.

XX

PA (GEHO) GEN HOSPITAL CORP.

PA (FARB) BAYER AG.

XX

PI Woolf C, D'urso D, Befort K, Costigan M;

XX

DR WPI: 2003-268312/26.

DR GENBANK; A32827.

XX

PT New composition comprising two or more isolated polypeptides, useful for

PT preparing a medicament for treating pain in an animal.

XX

PS Example 1; Page: 1017PP; English.

XX

The invention discloses a composition comprising two or more isolated rat
 CC or human polynucleotides or a polynucleotide which represents a fragment,
 CC derivative or allelic variation of the nucleic acid sequence. Also
 CC claimed are a vector comprising the novel polynucleotide, a host cell
 CC comprising the vector, a method for identifying a nucleotide sequence
 CC which is differentially regulated in an animal subjected to pain and a
 CC kit to perform the method, an array, a method for identifying an agent
 CC that increases or decreases the expression of the polynucleotide sequence
 CC that is differentially expressed in neuronal tissue of a first animal
 CC subjected to pain, a method for identifying a compound which regulates
 CC the expression of a polynucleotide sequence which is differentially
 CC expressed in an animal subjected to pain, a method for identifying a
 CC compound that regulates the activity of one or more of the
 CC polynucleotides, a method for producing a pharmaceutical composition, a
 CC method for identifying a compound or small molecule that regulates the

CC activity in an animal of one or more of the polypeptides given in the
 CC specification, a method for identifying a compound useful in treating
 CC pain and a pharmaceutical composition comprising the one or more
 CC polypeptides or their antibodies. The polynucleotide or the compound that
 CC modulates its activity is useful for preparing a medicament for treating
 CC pain (e.g., spinal segmental nerve injury (Chung), chronic constriction
 CC injury (CCI) and spared nerve injury (SNI) in an animal (e.g., gene
 CC therapy). The sequence presented is a rat protein (described in Table 3
 CC of the specification) which is differentially expressed during pain.
 CC Note: The sequence data for this patent did not form part of the printed
 CC specification, but was obtained in electronic form directly from WIPO at
 CC ftp://wipo.int/pub/published_pct_sequences.

SQ Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

XX

Sequence 352 AA:

Query Match 77.6%; Score 38; DB 7; Length 352;

Best Local Similarity 80.0%; Pred. No. 28;

Matches 8; Conservative 1; Mismatches 1; Indels 0; Gaps 0;

Query Match	77.6%	Score 38;	DB 7;	Length 352;				
Best Local Similarity	80.0%;	Pred. No. 28;						
Matches 8;	Conservative 1;	Mismatches 1;	Indels 0;	Gaps 0;				
Qy	1 HSFSGVASVE 10 :							
Db	306 HAFSPVASVE 315							
RESULT 26								
ADF30523								
ID	ADP30523 standard; protein; 352 AA.							
XX								
AC	ADF30523;							
XX								
DT	12-FEB-2004 (first entry)							
XX								
DE	Rat angiogenesis modulating protein #54.							
XX								
KW	rat; angiogenesis; angiogenesis modulating protein;							
KW	retinal neovascularisation; chorioidal neovascularisation;							
KW	chronic inflammation; myocardial ischaemia; stroke;							
KW	coronary artery disease; peripheral vascular disease.							
XX								
OS	Rattus norvegicus.							
XX								
PN	US2003162706-A1.							
XX								
PD	28-AUG-2003.							
XX								
PF	10-DEC-2002; 2002US-00316253.							
XX								
PR	08-FEB-2002; 2002US-0355495P.							
XX								
PR	26-JUN-2002; 2002US-0391758P.							
XX								
PA	(PROC) PROCTER & GAMBLE CO.							
XX								
PI	Peters KG, Thompson LJ, Wang F, Greis KD;							
XX								
WPI	WPI; 2003-711557/67.							
DR	N-PSB#; ADF30523.							
XX								
PT	Treating angiogenesis-mediated disorder, e.g., retinal or choroidal neovascularization or diseases associated with chronic inflammation or peripheral myocardial ischaemia, stroke, coronary artery disease or peripheral vascular disease.							
XX								
PT	The invention relates to a method of treating an angiogenesis-mediated disorder in a subject. The method is useful for treating angiogenesis-mediated disorder, e.g., retinal or choroidal neovascularisation or diseases associated with chronic inflammation, myocardial ischaemia, stroke, coronary artery disease or peripheral vascular disease. The present sequence is used in the exemplification of the invention.							
XX								
PS	Sequence 352 AA;							
XX								
PT	The invention relates to a method of treating an angiogenesis-mediated disorder in a subject. The method is useful for treating angiogenesis-mediated disorder, e.g., retinal or choroidal neovascularisation or diseases associated with chronic inflammation, myocardial ischaemia, stroke, coronary artery disease or peripheral vascular disease. The present sequence is used in the exemplification of the invention.							
XX								
PS	Claim 2; SEQ ID NO 86; 26pp; English.							
XX								
CC	The invention relates to a method of treating an angiogenesis-mediated disorder in a subject. The method is useful for treating angiogenesis-mediated disorder, e.g., retinal or choroidal neovascularisation or diseases associated with chronic inflammation, myocardial ischaemia, stroke, coronary artery disease or peripheral vascular disease. The present sequence is used in the exemplification of the invention.							
CC	SQ Sequence 292 AA;							
Query Match	77.6%	Score 38;	DB 7;	Length 352;				
Best Local Similarity	80.0%;	Pred. No. 28;						
Matches 8;	Conservative 1;	Mismatches 1;	Indels 0;	Gaps 0;				
Qy	1 HSFSGVASVE 10 :							
Db	306 HAFSPVASVE 315							
RESULT 27								
ADF30524								
ID	AAE03524 standard; protein; 292 AA.							
XX								
AC	AAE03524;							
XX								
Query Match	75.5%	Score 37;	DB 4;	Length 292;				
Best Local Similarity	60.0%;	Pred. No. 37;						
Matches 6;	Conservative 4;	Mismatches 0;	Indels 0;	Gaps 0;				

Qy 1 HSFGVAVSE 10
 ID AAB40380 standard; protein; 428 AA.
 DB 134 HSFAGLSLQ 143

RESULT 28
 RAB40380
 ID AAB40380 standard; protein; 428 AA.
 AC AAB40380;
 XX DT 08-FEB-2001 (first entry)
 DE Human ORFX ORF144 polypeptide sequence SEQ ID NO:288.
 XX Human; open reading frame; ORFX; detection; cytosatic; hepatotropic;
 KW vulnearcy; antipsoriatic; antiparkinsonian; notropic; neuroprotective;
 KW anticonvulsant; osteopathic; antiarthritic; immunosuppressant; cardiant;
 KW immunostimulant; thrombolytic; coagulant; vasoergic; antidiabetic;
 KW hypotensive; dermatological; immunosuppressive; antiinflammatory;
 KW antiviral; antibacterial; antifungal; antirheumatic; antithyroid;
 KW antihaemoc; gene therapy; cancer; proliferative disorder; hypertension;
 KW neurodegenerative disorder; oscoarthritis; graft vs host disease;
 KW cardiovascular disease; diabetes mellitus; hypothyroidism; AIDS;
 KW cholesterol ester storage; systemic lupus erythematosus; infection;
 KW severe combined immunodeficiency; malaria; autoimmune disorder; asthma;
 KW allergy; aplastic anaemia; nocturnal haemoglobinuria; burn; wound;
 KW bone damage; cartilage damage; antiinflammatory disease; coagulation;
 KW thrombosis; contraceptive.
 XX Homo sapiens.
 OS XX
 PN WO20058473-A2.
 PD 29-APR-2004.
 XX PR 20-OCT-2003; 2003WO-BP011658.
 PP 31-MAR-2000; 2000WO-US008621.
 XX PR 31-MAR-1999; 99US-0127607P.
 PR 02-APR-1999; 99US-0127630P.
 PR 05-APR-1999; 99US-0127720P.
 PR 30-MAR-2000; 2000US-00540763.
 XX PA (CUBA-) CURAGEN CORP.
 XX PI Shimkets RA, Leach M;
 XX DR WPI; 2000-602362/57.
 DR N-PSDB; AAC74589.

XX Novel nucleic acids and peptides derived from open reading frame X,
 PT useful for treating e.g. cancers, proliferative disorders,
 PT neurodegenerative disorders and cardiovascular disease.
 XX Claim 11; Page 584-585; 550pp; English.

PS AAC74446 to AAC77606 encode the proteins given in AAB40237 to AAB3397,
 CC which represent the human ORFX open reading frames 1 to 3161. The ORFX
 CC sequences have activities such as: cytosatic; hepatotropic; vulnerable;
 CC antipsoriatic; antiparkinsonian; notropic; neuroprotective; osteopathic;
 CC anticonvulsant; antiarthritic; immunosuppressant; immunostimulant;
 CC cardiant; thrombolytic; coagulant; vasoergic; antidiabetic; hypotensive;
 CC dermatological; immunosuppressive; antiinflammatory; antibacterial;
 CC antiviral; antifungal; antiarthritic; antithyroid; and antianaemic. The
 CC sequences can be used for determining the presence of or predisposition
 CC to, or preventing or treating pathological conditions associated with an
 CC ORFX-associated disorder. The nucleic acids can be used to express ORFX
 CC proteins in gene therapy vectors. The proteins and nucleic acids may be
 CC used to treat cancers, proliferative disorders, neurodegenerative disorders
 CC and/or carbon metabolism or they function as transcription factors. This polypeptide sequence is the c-terminal ester,
 CC expressed by a gene upregulated 1.3 fold or more in plants overexpressing
 CC the E2Fa/Dpa transcription factor, given in an exemplification of the

CC (SCID), AIDS, viral, bacterial or fungal infection, malaria, autoimmune
 CC disorders, asthma, allergies, aplastic anaemia, burns, wounds, bone and
 CC cartilage damage, nocturnal haemoglobinuria, antifibrinolytic disease; to
 CC enhance coagulation; to inhibit thrombosis; and as a contraceptive
 XX SQ Sequence 428 AA;

Query Match Score 37; DB 3; Length 428;
 Best Local Similarity 60.0%; Pred No. 57;
 Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFGVAVSE 10
 Db 377 HSFGVSSL 386

RESULT 29
 ADN72605
 ID ADN72605 standard; protein; 460 AA.
 XX AC ADN72605;
 XX DT 15-JUL-2004 (first entry)
 XX DB Thale cress protein upregulated in E2Fa/Dpa expressing plants SeqID 500.
 KW plant; transgenic; E2Fa/Dpa transcription factor; growth regulator;
 KW animal feed product; thale cress; cell wall biosynthesis;
 KW nitrogen metabolism; carbon metabolism.
 XX OS Arabidopsis thaliana.
 XX PN WO2004035798-A2.
 XX PR 2004-035798-A2.
 XX DR N-PSDB; ADN72604.

XX Altering plant characteristics, useful for producing plants for enzyme or
 PT pharmaceutical production comprises modifying in a plant, expression of
 PT one or more nucleic acids and/or modifying level or activity of one or
 PT more proteins.
 XX DR 2004-348466/32.
 XX PR 2002EP-0079408.
 XX PA (CROP-) CROPDESIGN NV.
 XX PI Inze D, De Veylder L, Vlieghe K;
 XX DR 2004-348466/32.
 XX PR 2002EP-0079408.

XX This invention relates to a novel method for altering one or more plant
 CC characteristics. Specifically, it refers to identifying genes that are up
 CC or down-regulated in transgenic plants overexpressing the heterodimeric
 CC E2Fa/Dpa transcription factor of Arabidopsis and using these sequences to
 CC alter plant characteristics accordingly. The present invention describes
 CC generating transgenic plants for the production of growth regulators,
 CC enzymes, therapeutics, pharmaceuticals and animal feed products, where
 CC the altered plant characteristics are selected from increased yield or
 CC biomass, enhanced survival capacity, stress tolerance, plant architecture
 CC or physiology, altered endoreduplication, biochemistry, signal
 CC transduction, storage lipid mobilisation and/or altered photosynthesis,
 CC each relative to the corresponding wild type plants. Accordingly, these
 CC sequences can also be useful as positive or negative selectable markers
 CC during transformation of cells or tissues. The identified genes play a
 CC role in a variety of biological processes such as DNA replication, cell
 CC wall biosynthesis, nitrogen and/or carbon metabolism or they function as
 CC transcription factors. This polypeptide sequence is the c-terminal ester,
 CC expressed by a gene upregulated 1.3 fold or more in plants overexpressing
 CC the E2Fa/Dpa transcription factor, given in an exemplification of the

CC Invention.
 XX Sequence 460 AA;
 SQ Sequence 460 AA;

Query Match 75.5%; Score 37; DB 8; Length 460;
 Best Local Similarity 88.9%; Pred. No. 62;
 Matches 8; Conservative 0; Mismatches 1; Indels 0; Gaps 0;

Qy 2 SFSGVAVB 10
 Db 452 SFSGVvSVE 460

RESULT 30
 ID AAY13385 standard; protein; 713 AA.
 XX AAY13385;
 AC XX
 DT 25-JUN-1999 (First entry)
 XX DE Amino acid sequence of protein PRO293.
 XX Secreted protein; transmembrane protein; human; enterocolitis;
 KW Zollinger-Ellison syndrome; Gastrointestinal ulceration;
 KW congenital microvillus atrophy; skin disease; cell growth;
 KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
 KW Parkinson's disease; Alzheimer's disease; ALS; neuropathy; fibromodulin;
 KW dermal scarring; Usher Syndrome; Atrophia areata; anti-thrombotic;
 KW wound healing; tissue repair.

XX OS Homo sapiens.
 XX PN W0914328-A2.

XX PD 25-MAR-1999.
 XX PF 16-SEP-1998;
 XX PR 17-SEP-1997; 9705-0059113P.
 PR 17-SEP-1997; 9705-0059115P.
 PR 17-SEP-1997; 9705-0059117P.
 PR 17-SEP-1997; 9705-0059119P.
 PR 17-SEP-1997; 9705-0059121P.
 PR 17-SEP-1997; 9705-0059122P.
 PR 18-SEP-1997; 9705-0059184P.
 PR 18-SEP-1997; 9705-0059163P.
 PR 18-SEP-1997; 9705-0059266P.
 PR 17-OCT-1997; 9705-0052125P.
 PR 17-OCT-1997; 9705-0062285P.
 PR 17-OCT-1997; 9705-0062287P.
 PR 24-OCT-1997; 9705-0063486P.
 PR 24-OCT-1997; 9705-0062814P.
 PR 24-OCT-1997; 9705-0052816P.
 PR 24-OCT-1997; 9705-0063045P.
 PR 24-OCT-1997; 9705-0063120P.
 PR 27-OCT-1997; 9705-0063121P.
 PR 28-OCT-1997; 9705-0063127P.
 PR 24-OCT-1997; 9705-0063128P.
 PR 27-OCT-1997; 9705-0063327P.
 PR 28-OCT-1997; 9705-0063329P.
 PR 28-OCT-1997; 9705-00633541P.
 PR 28-OCT-1997; 9705-00633542P.
 PR 28-OCT-1997; 9705-00633544P.
 PR 28-OCT-1997; 9705-00633549P.
 PR 28-OCT-1997; 9705-0063350P.
 PR 28-OCT-1997; 9705-0063354P.
 PR 29-OCT-1997; 9705-0063435P.
 PR 29-OCT-1997; 9705-0063704P.
 PR 29-OCT-1997; 9705-0063732P.
 PR 29-OCT-1997; 9705-0063734P.
 PR 29-OCT-1997; 9705-0063735P.
 PR 29-OCT-1997; 9705-0063738P.

PR 29-OCT-1997; 97US-0064215P.
 PR 31-OCT-1997; 97US-0063810P.
 PR 31-OCT-1997; 97US-0064103P.
 PR 03-NOV-1997; 97US-0064148P.
 PR 07-NOV-1997; 97US-006409P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065146P.
 PR 18-NOV-1997; 97US-0065593P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066164P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.

XX PA (GETH) GENENTECH INC.
 XX PI Wood WI, Gurney AL, Goddard A, Pennica D, Chen J, Yuan J;
 XX DR WPI; 1999-229533/19.
 XX DR N-PSDB; AAX52256.

XX PT New isolated human genes and polypeptides used in, e.g. treatment of gastrointestinal ulceration.
 XX PT PS Claim 12; Fig 86; 320pp; English.
 XX XX CC AY13344-403 represent secreted and transmembrane human proteins. The cDNA sequences are obtained from cDNA libraries, prepared from fetal lung, fetal kidney, fetal brain, fetal liver and fetal retina. The encoded polypeptides have specific uses based on their homology to known polypeptides, e.g. PRO211 and PRO217 can be used for disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions (e.g. enterocolitis, Zollinger-Ellison syndrome, gastrointestinal ulceration and congenital microvillus atrophy), skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis, epithelial cancers such as lung squamous cell carcinoma of the vulva and gliomas), potent effects on cell growth and development, diseases related to growth or survival of nerve cells including Parkinson's disease, Alzheimer's disease, ALS, neuropathies or cancer. PRO265 can be used as for fibromodulin, e.g., for reducing dermal scarring. PRO264 can be used as a target for anti-tumor drugs. PRO53 may be used in the treatment of Usher Syndrome or Acrophia areata; PRO269 can be used as an anti-thrombotic agent; PRO287 polypeptides and portions may have therapeutic applications in wound healing and tissue repair; PRO317 can be used for treating problems of the kidney, uterus, endometrium, blood vessels, or related tissue, e.g. in the heart of genital tract.

XX SQ Sequence 713 AA;

Query Match 75.5%; Score 37; DB 2; Length 713;
 Best Local Similarity 60.0%; Pred. No. 1e+02;
 Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HS5GVSVE 10
 Db 135 HSTAGLSQL 144

RESULT 31
 ID ADC78557 standard; protein; 713 AA.
 XX AC ADC78557;
 XX DR 01-JAN-2004 (first entry)
 XX DE Human PRO233 protein.
 XX KW antiinflammatory; antiulcer; cytostatic; antipsoriatic; antiparkinsonian; nootropic; neuroprotective; vasotropics; chemotaxic; angiogenic;

RW neurotrophic; osteopathic; antiasthmatic; antiarthritic; antirheumatic;
 RW antiarteriosclerotic; cardiotonic; antidiabetic; cerebroprotective;
 RW thrombolytic; immunomodulator; enterocolitis; Zollinger-Ellison syndrome;
 RW gastrointestinal ulceration; psoriasis; cancer; Parkinson's disease;
 RW Alzheimer's; ALS; neuropathy; dermal scarring; wound healing;
 RW nerve repair; thrombosis; bone; cartilage formation; angiogenesis;
 RW asthma; rheumatoid arthritis; multiple sclerosis; inflammatory disorder;
 RW atherosclerosis; cardiac injury; infertility; premature aging; AIDS;
 RW diabetes; stroke; gene therapy; transgenic; PRO; human.
 XX Homo sapiens.
 OS WO200104311-A1.
 XX 18-JAN-2001.
 PN PD
 XX 22-FEB-2000; 2000WO-US004414.
 XX PR
 XX PR 07-JUL-1999; 99US-0143048P.
 OS PR 26-JUL-1999; 99US-0145638P.
 XX PR 28-JUL-1999; 99US-0146222P.
 PN PR 08-SEP-1999; 99WO-US020594.
 XX PR 13-SEP-1999; 99WO-US020594.
 PD PR 15-SEP-1999; 99WO-US021090.
 XX PR 15-SEP-1999; 99WO-US021547.
 BP PR 05-OCT-1999; 99WO-US021089.
 XX PR 29-NOV-1999; 99WO-US028214.
 PR PR 30-NOV-1999; 99WO-US028313.
 XX PR 02-DEC-1999; 99WO-US028364.
 PA PR 02-DEC-1999; 99WO-US028365.
 (GETH) GENENTECH INC.
 XX PR 16-DEC-1999; 99WO-US030095.
 PI Chen J, Goddard A, Gurney AL, Hillian K, Pennica D, Wood WI;
 PI Yuan J;
 XX PR 20-DEC-1999; 99WO-US030911.
 DR PR 05-JAN-2000; 2000WO-US000219.
 DR PA (GETH) GENENTECH INC.
 XX PR Ashkenazi AJ, Botstein D, Desnoyers L, Ferrara N, Eaton DL, Fierman ME, Goddard A;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Kilaviv IJ;
 PI Godowski PJ, Grimaldi CJ, Gurney AL, Hillian KJ, Kilaviv IJ;
 PI Mathews JP, Pan J, Poni NF, Roy MA, Stewart TA,
 PI Williams PM, Wood WI;
 XX PR WPI; 2001-081051/09.
 DR DR-N-PSDB; AAF72414.
 XX PT Sixty one nucleic acids encoding PRO polypeptides which are useful in the
 PT treatment of skin diseases (e.g. psoriasis), cancers (e.g. lung squamous
 PT cell carcinoma) and neurodegenerative diseases (e.g. Alzheimer's
 PT disease).
 XX PS Claim 1; Fig 86; 393pp; English.
 XX CC The present sequence is one of sixty one novel secreted and transmembrane
 CC PRO polypeptides. The PRO polypeptides are useful for treating skin
 CC diseases (e.g. psoriasis), cancers (e.g. lung squamous cell carcinoma),
 CC gastrointestinal disorders (e.g. enterocolitis, neurodegenerative
 CC diseases (e.g. Alzheimer's disease, Parkinson's disease), wound repair,
 CC cardiovascular disorders (e.g. endometrial bleeding angiogenesis,
 CC ischaemias such as coronary ischaemia, atherosclerosis), inflammatory
 CC disorders (e.g. asthma, rheumatoid arthritis, multiple sclerosis),
 CC infertility, AIDS and diabetes and retinal disorders such as retinitis
 CC pigmentosum. The PRO nucleic acids have applications in molecular
 CC biology, including use as hybridization probes, and in chromosome and
 CC gene mapping.
 XX SQ Sequence 713 AA;
 -
 Query Match Score 37; DB 3; Length 713;
 Best Local Similarity 60.0%; Prod. No. 1e+02;
 Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 HSFSGVASVE 10
 ||||:|:||:
 Db 135 HSPAGLASLQ 144
 RESULT 32
 AAB80253
 ID AAB80253 standard; protein; 713 AA.
 XX AC AAB80253;
 XX DT 24-APR-2001 (first entry)
 DE Human PRO293 protein.
 XX Human; PRO; dermatological; antipsoriatic; cytostatic; antiinflammatory;
 RW antiparkinsonian nootropic; neuroprotective; vulnerary; cardiotonic;
 RW antiangiogenic; vasoactive; antiasthmatic; antirheumatic; cancer;
 RW antiinfertility; antidiabetic; antiviral; diabetes;
 RW ophthalmological; gene therapy; skin disease; gastrointestinal disorder;
 RW ischaemia; inflammation.

RESULT 33
 ABU71611
 ID ABU71611 standard; protein; 713 AA.
 XX AC ABU71631;

Query Match Score 37; DB 4; Length 713;
 Best Local Similarity 60.0%; Pred. No. 1e+02;
 Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 Qy 1 HSFGVASVE 10
 ||||:|:||:
 Db 135 HSPAGLASLQ 144

ID	ABU71486	standard; protein; 713 AA.	
XX	ABU71486;		
AC			
XX	DT 10-JUN-2003	(first entry)	
XX	Human PRO polypeptide #42.		
DS			
XX	Human: secreted and transmembrane protein; PRO polypeptide; cancer; Alzheimer's disease; ischaemia; cytosatic; nootropic; vasotropic; neuroprotective.		
XX	Homo sapiens.		
OS			
BN	US2002192659-A1.		
XX	PD 19-DEC-2002.		
XX	PF 10-JUL-2001;	2001US-00902853.	
XX	PR 17-SEP-1997;	97US-0059113P.	
XX	PR 17-SEP-1997;	97US-0059115P.	
PR	17-SEP-1997;	97US-0059117P.	
PR	17-SEP-1997;	97US-0059119P.	
PR	17-SEP-1997;	97US-0059121P.	
PR	17-SEP-1997;	97US-0059122P.	
PR	17-SEP-1997;	97US-0059132P.	
PR	18-SEP-1997;	97US-0059253P.	
PR	18-SEP-1997;	97US-0059256P.	
PR	15-OCT-1997;	97US-0062150P.	
PR	17-OCT-1997;	97US-0062289P.	
PR	17-OCT-1997;	97US-0062289P.	
PR	21-OCT-1997;	97US-0063466P.	
PR	24-OCT-1997;	97US-0062814P.	
PR	24-OCT-1997;	97US-0062816P.	
PR	24-OCT-1997;	97US-0063100P.	
PR	24-OCT-1997;	97US-0063121P.	
PR	24-OCT-1997;	97US-0063127P.	
PR	24-OCT-1997;	97US-0063128P.	
PR	27-OCT-1997;	97US-0063210P.	
PR	27-OCT-1997;	97US-0063339P.	
PR	28-OCT-1997;	97US-0063351P.	
PR	28-OCT-1997;	97US-0063352P.	
PR	28-OCT-1997;	97US-0063354P.	
PR	28-OCT-1997;	97US-0063549P.	
PR	28-OCT-1997;	97US-0063550P.	
PR	28-OCT-1997;	97US-0063564P.	
PR	29-OCT-1997;	97US-0063435P.	
PR	29-OCT-1997;	97US-0063435P.	
PR	29-OCT-1997;	97US-0063704P.	
PR	29-OCT-1997;	97US-0063732P.	
PR	29-OCT-1997;	97US-0063734P.	
PR	29-OCT-1997;	97US-0063735P.	
PR	29-OCT-1997;	97US-0063738P.	
PR	29-OCT-1997;	97US-0064215P.	
PR	31-OCT-1997;	97US-006370D.	
PR	31-OCT-1997;	97US-006410P.	
PR	03-NOV-1997;	97US-0064248P.	
PR	07-NOV-1997;	97US-006480D.	
PR	12-NOV-1997;	97US-0065186P.	
PR	17-NOV-1997;	97US-0065846P.	
PR	18-NOV-1997;	97US-0065893P.	
PR	21-NOV-1997;	97US-0066120P.	
PR	21-NOV-1997;	97US-0066364P.	
PR	24-NOV-1997;	97US-0066453P.	
PR	24-NOV-1997;	97US-0066466P.	
PR	24-NOV-1997;	97US-0066511P.	
PR	24-NOV-1997;	97US-0066770P.	
PR	24-NOV-1997;	97US-0066772P.	
PR	10-SEP-1998;	98WO-US018824.	
PR	14-SEP-1998;	98WO-US019177.	
PR	16-SEP-1998;	98WO-US019330.	
PR	17-SEP-1998;	98WO-US019437.	
SQ	Sequence 713 AA;		
Query	Match Best Local Similarity	75.5%; 60.0%;	Score 37; DB 6; Length 713;
Matches	6;	Conservative 4;	Pred. No. 1e+02; Mismatches 0; Indels 0; Gaps 0;
Qy	1 HSPSGYASVE 10	: : :	
Dy	135 HSPAGLALSQ 144		
	RESULT 35		
	ABU7132		
	ID ABU71932	standard; protein; 713 AA.	
	XX		

AC XX	ABU71932;	
DR XX	12-JUN-2003	(first entry)
DE XX	Human secreted/transmembrane protein PRO293 .	
DE KW	Human; secreted protein; transmembrane protein; PRO; gene therapy;	
DE KW	chromosome identification; chromosome marker.	
OS XX	Homo sapiens .	
US XX	US2003003530-A1.	
PD XX	PD JAN-2003 ..	
PP XX	11-JUL-2001; 2001US-00904011.	
PR XX	17-SEP-1997; 97US-0059111P.	
PR XX	18-SEP-1997; 97US-0059118P.	
PR XX	18-SEP-1997; 97US-0059265P.	
PR XX	15-OCT-1997; 97US-0062125P.	
PR XX	17-OCT-1997; 97US-0062287P.	
PR XX	17-OCT-1997; 97US-0062287P.	
PR XX	21-OCT-1997; 97US-0063489P.	
PR XX	24-OCT-1997; 97US-0062816P.	
PR XX	24-OCT-1997; 97US-0062816P.	
PR XX	24-OCT-1997; 97US-0063015P.	
PR XX	24-OCT-1997; 97US-0063120P.	
PR XX	24-OCT-1997; 97US-0063120P.	
PR XX	24-OCT-1997; 97US-0063120P.	
PR XX	27-OCT-1997; 97US-0063138P.	
PR XX	27-OCT-1997; 97US-0063322P.	
PR XX	27-OCT-1997; 97US-0063322P.	
PR XX	28-OCT-1997; 97US-0063329P.	
PR XX	29-OCT-1997; 97US-0063543P.	
PR XX	28-OCT-1997; 97US-0063542P.	
PR XX	28-OCT-1997; 97US-0063542P.	
PR XX	28-OCT-1997; 97US-0063549P.	
PR XX	28-OCT-1997; 97US-0063550P.	
PR XX	29-OCT-1997; 97US-0063554P.	
PR XX	29-OCT-1997; 97US-0063435P.	
PR XX	29-OCT-1997; 97US-0063704P.	
PR XX	29-OCT-1997; 97US-0063722P.	
PR XX	29-OCT-1997; 97US-0063734P.	
PR XX	29-OCT-1997; 97US-0063735P.	
PR XX	29-OCT-1997; 97US-0063738P.	
PR XX	29-OCT-1997; 97US-0064215P.	
PR XX	31-OCT-1997; 97US-0063870P.	
PR XX	31-OCT-1997; 97US-0064103P.	
PR XX	03-NOV-1997; 97US-0064120P.	
PR XX	07-NOV-1997; 97US-0064248P.	
PR XX	12-NOV-1997; 97US-0064809P.	
PR XX	17-NOV-1997; 97US-005186P.	
PR XX	18-NOV-1997; 97US-0065846P.	
PR XX	21-NOV-1997; 97US-0065893P.	
PR XX	24-NOV-1997; 97US-0066770P.	
PR XX	24-NOV-1997; 97US-0066772P.	
PR XX	10-SEP-1998; 98WO-US018824.	
PR XX	14-SEP-1998; 98WO-US019177.	
PR XX	16-SEP-1998; 98WO-US019330.	
PR XX	17-SEP-1998; 98WO-US019437.	
PR XX	01-DEC-1998; 98WO-US025108.	
PR XX	08-SEP-1999; 99WO-US021594.	
PR XX	13-SEP-1999; 99WO-US029944.	

PR 15-SEP-1999;
 PR 15-SEP-1999;
 PR 05-OCT-1999;
 PR 29-NOV-1999;
 PR 30-NOV-1999;
 PR 01-DEC-1999;
 PR 02-DEC-1999;
 PR 02-DEC-1999;
 PR 16-DEC-1999;
 PR 20-DEC-1999;
 PR 20-DEC-1999;
 PR 05-JAN-2000;
 PR 11-FEB-2000;
 PR 22-FEB-2000;
 PR 24-FEB-2000;
 PR 02-MAR-2000;
 PR 02-MAR-2000;
 PR 20-MAR-2000;
 PR 30-MAR-2000;
 PR 22-MAY-2000;
 PR 02-JUN-2000;
 PR 28-JUL-2000;
 PR 24-AUG-2000;
 PR 18-SEP-2000;
 XX PA (GETH) GENENTECH INC.
 XX PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N,
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A,
 PI Godowski PJ, Grimaldi JC, Gurney AL, Hillian KJ, Kljavin IJ,
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX WI; 2003-339602/31.
 DR N-PSDB; AC60202.
 XX PT New transmembrane polypeptides and nucleic acids encoding the
 PT polypeptides, useful in gene therapy, in chromosome identification, as
 PT chromosome markers, in generating probes and in tissue typing.
 XX PS Claim 12; Fig 86; 484pp; English.
 XX CC The invention relates to an isolated nucleic acid with at least 80%
 CC nucleic acid sequence identity to a nucleic acid sequence encoding one or
 CC 61 secreted/transmembrane polypeptides, or PRO polypeptides or encoding one
 CC PRO protein extracellular domain. Also included are a vector comprising a PRO
 CC polypeptide (by culturing the host cell for the expression of the PRO
 CC polypeptide, and recovering the PRO polypeptide from the cell culture)
 CC an isolated PRO polypeptide (having at least 80% sequence identity to
 CC a) an amino acid sequence selected from the 61 PRO proteins; (b) an anti-PRO antibody,
 CC acid sequence encoded by a nucleic acid molecule deposited with an ATCC
 CC number (detailed in the specification); or (c) an extracellular domain
 CC a PRO polypeptide or to a PRO polypeptide lacking its associated signal
 CC peptide), a chimeric molecule comprising a PRO polypeptide fused to
 CC heterologous amino acid sequence, an anti-PRO antibody, detecting a
 CC PRO245 or PRO1868 in a sample suspected of containing the polypeptide
 CC linking a bioactive molecule to a cell expressing a PRO245 or PRO1868
 CC modulating at least one biological activity of a cell expressing a PRO245 or
 CC PRO1868. Nucleic acids which encode PRO can be used to generate either
 CC transgenic animals or knock-out animals which may be used in the
 CC development and screening of therapeutically useful reagents. The nucleic
 CC acids may also be used in gene therapy, in chromosome identification,
 CC chromosome markers, or in generating probes. The PRO polypeptides are
 CC useful as molecular markers for protein electrophoresis, and the isoelectric
 CC nucleic acids may be used for recombinantly expressing those markers.
 CC PRO polypeptides and nucleic acids may also be used in tissue typing.
 CC Anti-PRO antibodies are useful in diagnostic assays for PRO, and in
 CC affinity purification of PRO from recombinant cell culture or natural
 CC sources. The present sequence represents a PRO protein
 XX Sequence 713 AA;
 SQ Query Match 75 5%; Score 37; DB 6; Length 713;

Best Local Similarity 60.0%; Pred. No. 1e+02; Mismatches 4; Indels 0; Gaps 0;

Qy 1 HSPGVAVSE 10
Oy ||| :||| :|||:
Db 135 HSPAGLALIQ 144

RESULT 36

AB001815 07-AUG-2003 (first entry)

XX Novel human secreted and transmembrane protein PRO293.

DE Human; secreted and transmembrane protein; PRO; pharmaceutical;
KW diagnostic; biosensor; bioreactor; Parkinson's disease;
KW Alzheimer's disease; inflammation; nephritis; wound healing;
KW nerve repair; collateral blood vessel formation; cancer;
KW colorectal cancer; haemorrhage; rheumatoid arthritis; diabetes;
KW cirrhosis; fibrosis; restenosis; dermal fibrotic condition; keloid;
KW scarring; ischaemia; stroke; hypertension; heart attack; atherosclerosis;
KW infertility; gene therapy;

XX OS Homo sapiens.

XX US2002197671-A1.

XX PD 26-DEC-2002.

XX PF 17-JUL-2001; 2001US-00907824.

XX PR 17-SEP-1997; 97US-0059113P.
PR 17-SEP-1997; 97US-0059115P.
PR 17-SEP-1997; 97US-0059117P.
PR 17-SEP-1997; 97US-0059119P.
PR 17-SEP-1997; 97US-0059121P.
PR 17-SEP-1997; 97US-0059122P.
PR 17-SEP-1997; 97US-0059184P.
PR 18-SEP-1997; 97US-0059263P.
PR 18-SEP-1997; 97US-0059266P.
PR 15-OCT-1997; 97US-0062125P.
PR 17-OCT-1997; 97US-0062285P.
PR 21-OCT-1997; 97US-0063287P.
PR 24-OCT-1997; 97US-0063286P.
PR 24-OCT-1997; 97US-00632814P.
PR 24-OCT-1997; 97US-0062816P.
PR 24-OCT-1997; 97US-0063045P.
PR 24-OCT-1997; 97US-0063120P.
PR 24-OCT-1997; 97US-0063121P.
PR 28-OCT-1997; 97US-00633127P.
PR 24-OCT-1997; 97US-00633128P.
PR 27-OCT-1997; 97US-0063327P.
PR 28-OCT-1997; 97US-0063329P.
PR 28-OCT-1997; 97US-0063341P.
PR 28-OCT-1997; 97US-0063342P.
PR 28-OCT-1997; 97US-0063344P.
PR 28-OCT-1997; 97US-0063349P.
PR 28-OCT-1997; 97US-0063350P.
PR 29-OCT-1997; 97US-0063343P.
PR 29-OCT-1997; 97US-00633704P.
PR 29-OCT-1997; 97US-00633732P.
PR 29-OCT-1997; 97US-00633734P.
PR 29-OCT-1997; 97US-00633735P.
PR 29-OCT-1997; 97US-00633738P.
PR 29-OCT-1997; 97US-0064215P.
PR 31-OCT-1997; 97US-0063870P.
PR 31-OCT-1997; 97US-0064103P.
PR 03-NOV-1997; 97US-0064248P.

PR 07-NOV-1997; 97US-0064809P.
PR 12-NOV-1997; 97US-0065186P.
PR 17-NOV-1997; 97US-0065816P.
PR 18-NOV-1997; 97US-0065633P.
PR 21-NOV-1997; 97US-0066120P.
PR 24-NOV-1997; 97US-0066433P.
PR 24-NOV-1997; 97US-0066466P.
PR 24-NOV-1997; 97US-0066511P.
PR 24-NOV-1997; 97US-0066770P.
PR 24-NOV-1997; 97US-0066772P.
PR 10-SEP-1998; 98WO-US018824.
PR 14-SEP-1998; 98WO-US019177.
PR 16-SEP-1998; 98WO-US019330.
PR 01-DEC-1998; 98WO-US021437.
PR 01-DEC-1998; 98WO-US025108.
PR 08-SEP-1998; 99WO-US020594.
PR 13-SEP-1998; 99WO-US020944.
PR 15-SEP-1998; 99WO-US021190.
PR 05-OCT-1998; 99WO-US021547.
PR 05-OCT-1998; 99WO-US022089.
PR 29-NOV-1998; 99WO-US028214.
PR 30-NOV-1998; 99WO-US023313.
PR 01-DEC-1999; 99WO-US028301.
PR 02-DEC-1999; 99WO-US028564.
PR 02-DEC-1999; 99WO-US02865.
PR 16-DEC-1999; 99WO-US030095.
PR 20-DEC-1999; 99WO-US030911.
PR 20-DEC-1999; 99WO-US03099.
PR 05-JAN-2000; 2000WO-US002019.
PR 11-FEB-2000; 2000WO-US003565.
PR 22-FEB-2000; 2000WO-US00414.
PR 24-FEB-2000; 2000WO-US005004.
PR 02-MAR-2000; 2000WO-US005841.
PR 20-MAR-2000; 2000WO-US007377.
PR 30-MAR-2000; 2000WO-US008439.
PR 22-MAY-2000; 2000WO-US014042.
PR 02-JUN-2000; 2000WO-US015264.
PR 28-JUL-2000; 2000WO-US020710.
PR 24-AUG-2000; 2000WO-US023328.
PR 18-SEP-2000; 2000US-00665350.

XX (GETH) GENENTECH INC.

PA XX Ashkenazi A, Botstein D, Desnoyers L, Ferrara N, Eaton DL, Gerber H, Gerritsen ME, Goddard A, Filvaroff E, Fong S, Gao W, Grimaldi JC, Gurney AL, Hillian KJ, Godowski PJ, Klijavin IJ, Mather JP, Pan J, Paponi NF, Roy MA, Stewart TA, Williams PM, Wood WI;

XX DR 2003-370793/35.
DR N-PSDB; ACD07602.

XX Claim 12; Fig 86; 482pp; English.

PT New genes and secreted and transmembrane polypeptides (e.g. PRO245 or PRO335), useful for treating or diagnosing e.g. Alzheimer's disease, cancers, hemorrhage, rheumatoid arthritis, diabetes, cirrhosis, ischemia or strokes.

CC The invention describes a new isolated nucleic acid molecule comprising the full length coding sequence of the DNA deposited with the American Type Culture Collection (e.g. ATCC Deposit No. 209358) , or a sequence with at least 80% identity to a DNA encoding a PRO polypeptide comprising any of 61 sequences having 164-1119 amino acids defined in the specification. The PRO polypeptides or polynucleotides are useful as pharmaceutical diagnostics, biosensors or bioreactors. These are particularly useful for detecting or treating e.g. Parkinson's disease, Alzheimer's disease, inflammations, nephritis, wound healing, nerve repair, collateral blood vessel formation, cancers (e.g. colorectal cancer), hemorrhage (or reduce risk for haemorrhage), rhumatoid arthritis, diabetes, cirrhosis of the liver, fibrosis of the lungs, restenosis, dermal fibrotic conditions (e.g. keloids or scarring),

CC ischaemia; strokes, hypertension, heart attacks, atherosclerosis, or CC infertility in mammals (e.g. humans, dogs, cats, cattle, horses, sheep, CC pigs, goats, or rabbits). The PRO polypeptides are useful as targets for CC therapeutic intervention in these diseases, and diagnostic determination CC of the presence of these diseases. The PRO polypeptides are also useful CC as molecular weight markers, or for chromosome identification. The PRO CC genes are useful as hybridisation probes, or for screening libraries of CC human cDNA, genomic DNA or mRNA. The PRO genes may also be used in gene CC therapy, particularly for replacing a defective gene. This is the amino CC acid sequence of a novel human secreted and transmembrane PRO polypeptide CC

XX Sequence 713 AA;

Query Match 1 HSFSGVAVSE 10
Best Local Similarity 75.5%; Score 37; DB 6; Length 713;
Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy ABUS4388 standard; protein; 713 AA.
Db ABUS4388;
XX 10-MAR-2003 (first entry)

DB Human secreted/transmembrane protein PRO293.

XX Human; PRO; secreted protein; transmembrane protein; enterocolitis; KW gastrointestinal ulceration; skin disease;
KW abnormal keratinocyte differentiation; psoriasis; epithelial cancer;
KW squamous cell carcinoma; Alzheimer's disease; Parkinson's disease;
KW amyotrophic lateral sclerosis; inflammatory disease;
KW rheumatoid arthritis; asthma; multiple sclerosis; organ failure;
KW atherosclerosis; cardiac injury; infertility; birth defect;
KW premature aging; AIDS; acquired immunodeficiency syndrome; cancer;
KW diabetic complication; wound repair.
XX Homo sapiens.
OS US2002132240-A1.

PN XX

PD 19-SEP-2002.

XX PF 18-JUL-2001; 2001US-00909320.

PR XX

PR 17-SEP-1997; 970US-0059113P.

PR 17-SEP-1997; 970US-0059115P.

PR 17-SEP-1997; 970US-0059117P.

PR 17-SEP-1997; 970US-0059119P.

PR 17-SEP-1997; 970US-0059121P.

PR 17-SEP-1997; 970US-0059122P.

PR 17-SEP-1997; 970US-0059124P.

PR 18-SEP-1997; 970US-0059263P.

PR 18-SEP-1997; 970US-0059266P.

PR 15-OCT-1997; 970US-00592125P.

PR 17-OCT-1997; 970US-0062285P.

PR 17-OCT-1997; 970US-0062287P.

PR 21-OCT-1997; 970US-0063486P.

PR 24-OCT-1997; 970US-0062814P.

PR 24-OCT-1997; 970US-0062816P.

PR 24-OCT-1997; 970US-0063045P.

PR 24-OCT-1997; 970US-0063120P.

PR 24-OCT-1997; 970US-0063121P.

PR 24-OCT-1997; 970US-0063127P.

PR 27-OCT-1997; 970US-0063327P.

PR 27-OCT-1997; 970US-0063329P.

PR 28-OCT-1997; 970US-0063541P.

PR 28-OCT-1997; 970US-0063544P.

PR 28-OCT-1997; 970US-0063549P.

PR 28-OCT-1997; 970US-0063550P.

PR 28-OCT-1997; 970US-0063564P.

PR 29-OCT-1997; 970US-006345P.

PR 29-OCT-1997; 970US-0063704P.

PR 29-OCT-1997; 970US-0063732P.

PR 29-OCT-1997; 970US-0063734P.

PR 29-OCT-1997; 970US-0063735P.

PR 29-OCT-1997; 970US-0063738P.

PR 31-OCT-1997; 970US-0064215P.

PR 31-OCT-1997; 970US-0063870P.

PR 03-NOV-1997; 970US-0064103P.

PR 07-NOV-1997; 970US-0064848P.

PR 12-NOV-1997; 970US-0065186P.

PR 17-NOV-1997; 970US-0065846P.

PR 18-NOV-1997; 970US-006593P.

PR 21-NOV-1997; 970US-0066120P.

PR 21-NOV-1997; 970US-006364P.

PR 24-NOV-1997; 970US-0066453P.

PR 24-NOV-1997; 970US-0066466P.

PR 24-NOV-1997; 970US-0065511P.

PR 24-NOV-1997; 970US-0066770P.

PR 24-NOV-1997; 970US-0066772P.

PR 24-NOV-1998; 98RIO-US018824.

PR 24-NOV-1998; 98RIO-US019177.

PR 24-NOV-1998; 98RIO-US019330.

PR 24-NOV-1998; 98RIO-US019437.

PR 01-DEC-1998; 98RIO-US025108.

PR 10-DEC-1998; 99RIO-US00594.

PR 14-SEP-1998; 99RIO-US020944.

PR 15-SEP-1998; 99RIO-US021090.

PR 15-SEP-1998; 99RIO-US021547.

PR 05-OCT-1999; 99RIO-US023089.

PR 29-NOV-1999; 99RIO-US028214.

PR 30-NOV-1999; 99RIO-US028313.

PR 01-DEC-1999; 99RIO-US028301.

PR 02-DEC-1999; 99RIO-US028564.

PR 02-DEC-1999; 99RIO-US028565.

PR 16-DEC-1999; 99RIO-US030095.

PR 20-DEC-1999; 99RIO-US030911.

PR 20-DEC-1999; 99RIO-US030999.

PR 06-JAN-2000; 2000WO-US000219.

PR 11-FEB-2000; 2000WO-US003565.

PR 22-FEB-2000; 2000WO-US004414.

PR 24-FEB-2000; 2000WO-US005004.

PR 02-MAR-2000; 2000WO-US005841.

PR 20-MAR-2000; 2000WO-US007377.

PR 30-MAR-2000; 2000WO-US008439.

PR 22-MAY-2000; 2000WO-US14042.

PR 02-JUN-2000; 2000WO-US015264.

PR 28-JUL-2000; 2000WO-US020710.

PR 24-AUG-2000; 2000WO-US23328.

PR 18-SEP-2000; 2000US-00665350.

XX (GTH) GENENTECH INC.

PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N;

PI Filivaroff E, Fong S, Gao W, Gerber H, Gerritsen MB, Goddard A;

PI Godowski PJ, Grimaldi JC, Gurrey AL, Klijavin IJ;

PI Mather JP, Pan J, Ponzi NF, Roy MA, Stewart TA;

PI Williams PM, Wood WI;

DR WPI: 2003-147434/14.

DR N-FSDB; ABX1650.

PT New PRO polypeptides and nucleic acid molecules, useful in diagnosing or

PT treating inflammatory diseases, organ failure, atherosclerosis, cardiac

PT injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's

PT disease.

XX

Claim 12: Fig 86; 473pp; English.

The invention relates to an isolated PRO polypeptide having at least 80% amino acid sequence identity to:

- (a) any one of 61 fully defined amino acid sequences given in the specification (appearing as ABU5447-ABU5407);
- (b) an amino acid sequence encoded by the nucleotide sequence deposited under American Type Culture Collection (accession numbers listed in the specification);
- (c) any one of the PRO sequences which lacks its associated signal peptide;
- (d) an extracellular domain of the PRO polypeptide with its associated signal peptide; or
- (e) an extracellular domain of the PRO polypeptide which lacks its associated signal peptide. Also included are the nucleic acids encoding the PRO polypeptides, vectors, host cells and anti-PRO antibodies. The PRO polypeptides and nucleic acids are useful in diagnosing or treating enterocolitis, gastrointestinal ulceration, skin diseases associated with abnormal keratinocyte differentiation, e.g. psoriasis or epithelial cancers such as squamous cell carcinoma, Alzheimer's disease, Parkinson's disease, ankylosing spondylitis, inflammatory diseases, e.g., rheumatoid arthritis, asthma or multiple sclerosis, organ failure, atherosclerosis, cardiac injury, infertility, birth defects, premature aging, AIDS, cancer, diabetic complications, or mutations in General. The polypeptides are also useful for wound repair and associated therapies concerned with re-growth of tissue. The nucleotide sequences may be used as hybridization probes in chromosome and gene mapping, or in generating antisense RNA and DNA. PRO nucleic acids are also useful in preparing PRO polypeptides, in assays to identify other proteins or molecules involved in binding reaction, to generate transgenic animals or knockout animals, which in turn are useful in the development and screening of therapeutically useful reagents, for chromosome identification, and tissue typing. The PRO polypeptides and nucleic acid molecules are also useful in gene therapy, and as molecular weight markers for protein electrophoresis purposes. The anti-PRO antibodies may be used in diagnostic assays for PRO, or for the affinity purification of PRO from recombinant cell culture or natural sources. The present sequence represents a PRO polypeptide.

Sequence 713 AA;

Questy Match Similarity 75.5%; Score 37; DB 6; Length 713;
 Best Local Matches 6; Conservative 60.0%; Prod. No 1e+02;
 Mismatches 0; Indels 0

1 HSPSGVYASVE 10
| | : | : | :
1.35 HSPAGLQLQ 144

ABO47403 ;
X C X X 08-OCT-2003 (first entry)
X X X

Human secreted transmembrane porcine-type EGR-3.

Homo sapiens.

NN US2003044839-A1.
XX DD 06-MAR-2003.
PP 10-JUL-2001: 2001US-00902903.

PR	30-NOV-1999;	99W0-US028313.	Db	135	HSPAGLASLQ 144
PR	01-DEC-1999;	99W0-US028301.			
PR	02-DEC-1999;	99W0-US028364.			
PR	02-DEC-1999;	99W0-US028565.			
PR	16-DEC-1999;	99W0-US030095.			
PR	20-DEC-1999;	99W0-US032091.	RESULT	39	
PR	20-DEC-1999;	99W0-US032091.	ID	ABU64540	standard; protein; 713 AA.
PR	03-JAN-2000;	2000WO-US000219.	XX		
PR	11-FEB-2000;	2000WO-US033565.	AC	ABU64540;	
PR	22-FEB-2000;	2000WO-US004414.	XX		
PR	24-FEB-2000;	2000WO-US05004.	DT	13-MAY-2003	(first entry)
PR	02-MAR-2000;	2000WO-US050841.	XX		
PR	20-MAR-2000;	2000WO-US07377.	DE		
PR	30-MAR-2000;	2000WO-US08439.	XX		
PR	22-MAY-2000;	2000WO-US014042.	KW		
PR	02-JUN-2000;	2000WO-US15264.	KW		
PR	28-JUL-2000;	2000WO-US020710.	KW		
PR	24-AUG-2000;	2000WO-US023328.	KW		
PR	18-SEP-2000;	2000WO-US023328.	KW		
PR	PR	XX	KW		
(GBTH) GENENTECH INC.	XX		KW		
PI	Ashkenazi A,	Botstein D,	Desnoyers L,	Eaton DL,	Ferrara N;
PT	Filvaroff E,	Fong S,	Gao W,	Gerber H,	Gerritsen MB;
PT	Godowski PJ,	Grimaldi JC,	Gurney AL,	Hillan KJ,	Goddard A;
PT	Mather JP,	Pan J,	Pacini MF,	Roy MA,	Kljaviv IJ;
PT	Williams PM,	Wood WI;	Tummas D;		
PT	XX				
WPI:	2003-492258/46.		XX		
DR	N-PSDB, ACH06982.		XX		
CC	Novel secreted transmembrane polypeptides and polynucleotides		XX		
CC	encoding them useful for treating abnormal bleeding involved in		XX		
CC	gynecological diseases, skin diseases and neurodegenerative diseases.		XX		
RS	Claim 12; Fig 86; 478PP; English.		XX		
CC	The invention relates to an isolated PRO polypeptide. PRO317 is useful in		CC		
CC	diagnosing or treating abnormal bleeding involved in gynecological		CC		
CC	diseases e.g. to avoid or lessen the need for hysterectomy. PRO317 may		CC		
CC	also be useful as an agent that affects angiogenesis and PRO317 is useful		CC		
CC	in anti-tumour indications or in treating coronary ischaemic conditions.		CC		
CC	PRO211 and PRO217 polypeptides are useful for treating disorders		CC		
CC	associated with the preservation and maintenance of gastrointestinal		CC		
CC	mucosa and the repair of acute and chronic mucosal lesions, skin diseases		CC		
CC	associated with abnormal keratinocyte differentiation (e.g. psoriasis).		CC		
CC	PRO187 polypeptide is useful for treating Parkinson's disease,		CC		
CC	Alzheimer's disease, amyotrophic lateral sclerosis (ALS), neuropathies		CC		
CC	and disease related to uncontrolled cell growth, e.g. cancer. PRO19		CC		
CC	polypeptide plays a regulatory role in the blood coagulation cascade.		CC		
CC	PRO216 polypeptides which serve as tumour specific antigens may be		CC		
CC	exploited as therapeutic targets for anti-tumour drugs. PRO269		CC		
CC	polypeptide is useful as an antithrombotic agent with reduced risk for		CC		
CC	haemorrhage as compared with heparin. PRO317 polypeptide is useful in		CC		
CC	treating endometrial bleeding angiogenesis. PRO287 polypeptides and		CC		
CC	portion have therapeutic applications in wound healing and tissue repair.		CC		
CC	PRO234 polypeptides are useful for treating asthma, rheumatoid arthritis,		CC		
CC	psoriasis and multiple sclerosis. The polypeptide and its nucleic acid		CC		
CC	are useful for tissue typing. PRO antibodies are useful for		CC		
CC	immunochemical staining and/or assay of sample fluids. Anti PRO		CC		
CC	antibodies are useful in diagnostic assays for PRO e.g. detecting its		CC		
CC	expression in specific cells, tissues or serum and for affinity		CC		
CC	purification of PRO from recombinant cell culture or natural sources. The		CC		
CC	present sequence represents the amino acid sequence of a human secreted/		CC		
CC	transmembrane PRO polypeptide.		XX		
SQ	Sequence 713 AA;		XX		
Query Match	75.5%;	Score 37;	DB 6;	Length 713;	
Best Local Similarity	60.0%;	Pred. No. 1e+02;			
Matches 6;	Conservative 4;	Mismatches 0;	Indels 0;	Gaps 0;	
1 HSFGVAVSE 10					

		Matches	6;	Conservative	4;	Mismatches	0;	Indels	0;	Gaps	0;
PR	24 -NOV-1997;	97US-0066453P.									
PR	24 -NOV-1997;	97US-0066456P.									
PR	24 -NOV-1997;	97US-006651P.									
PR	24 -NOV-1997;	97US-0066770P.									
PR	24 -NOV-1997;	97US-0066772P.									
PR	10 -SEP-1998;	98WO-US019824.									
PR	14 -SEP-1998;	98WO-US019177.									
PR	16 -SEP-1998;	98WO-US019310.									
PR	17 -SEP-1998;	98WO-US019427.									
PR	01 -DEC-1998;	98WO-US025108.									
PR	08 -SEP-1999;	99WO-US020591.									
PR	13 -SEP-1999;	99WO-US020914.									
PR	15 -SEP-1999;	99WO-US021030.									
PR	15 -SEP-1999;	99WO-US021541.									
PR	05 -OCT-1999;	99WO-US023089.									
PR	29 -NOV-1999;	99WO-US028211.									
PR	30 -NOV-1999;	99WO-US028313.									
PR	01 -DEC-1999;	99WO-US028301.									
PR	02 -DEC-1999;	99WO-US028564.									
PR	02 -DEC-1999;	99WO-US028565.									
PR	16 -DEC-1999;	99WO-US030905.									
PR	20 -DEC-1999;	99WO-US030911.									
PR	05 -JAN-2000;	2000WO-US003099.									
PR	05 -JAN-2000;	2000WO-US003129.									
PR	11 -FEB-2000;	2000WO-US003555.									
PR	22 -FEB-2000;	2000WO-US004114.									
PR	24 -FEB-2000;	2000WO-US005004.									
PR	02 -MAR-2000;	2000WO-US005841.									
PR	20 -MAR-2000;	2000WO-US007377.									
PR	30 -MAR-2000;	2000WO-US008439.									
PR	22 -MAY-2000;	2000WO-US014042.									
PR	28 -JUN-2000;	2000WO-US015264.									
PR	24 -AUG-2000;	2000WO-US020710.									
PR	18 -SEP-2000;	2000WO-US033388.									
XX		2000US-00665350.									
PA	(GETH) GENENTECH INC.										
XX	Ashkenazi A, Borstein D, Desnoyers L, Eaton DL, Ferrara N;										
PI	Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;										
PI	Godowski PJ, Grimaldi JC, Hillian KJ, Klijavins IJ;										
PI	Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Thomas D;										
PI	Williams PM, Wood WI;										
XX											
DR	WPI: 2003-268105/28.										
DR	N-PSDB; ABX6219.										
XX	Claim 12; Fig 86; 47pp; English.										
XX	The invention discloses isolated PRO secreted/transmembrane polypeptides and the nucleic acid encoding them. The polypeptides can be used to raise antibodies that specifically bind to the PRO polypeptide, for linking a bioactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. The PRO polypeptides or polynucleotides are also useful as pharmaceuticals, diagnostics, biosensors or bioreactor, for detecting or treating e.g. hyperplasia, endometriosis, cancers (e.g. those involving solid tumors), ischaemia, coronary arterial disease, polycystic kidney disease, chronic or acute renal failure, or inflammatory responses (e.g. asthma, rheumatoid arthritis, psoriasis or multiple sclerosis) in mammals. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The sequences presented in ABU64499-ABU6559 are the PRO polynucleotides of the invention										
XX	Sequence 713 AA;										
SQ	Query Match Best Local Similarity	75.5%;	Score 37;	DB 6;	Length 713;	Pred. No. 1e+02;					

PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0066425P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0099803P.
 PR 10-SEP-1998; 98US-009918824.
 PR 14-SEP-1998; 98US-0100262P.
 PR 16-SEP-1998; 98WO-US019177.
 PR 07-JUL-1998; 98US-0100858P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104080P.
 PR 01-DEC-1998; 98WO-US009304P.
 PR 22-DEC-1998; 98US-0113296P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-0145698P.
 PR 28-JUL-1999; 99US-0146222P.
 PR 08-SEP-1999; 99WO-US0020591.
 PR 13-SEP-1999; 99WO-US0020944.
 PR 15-SEP-1999; 99WO-US021040.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US021547.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US02854.
 PR 02-DEC-1999; 99WO-US028565.
 PR 16-DEC-1999; 99WO-US030095.
 PR 20-DEC-1999; 99WO-US030911.
 PR 01-DEC-1999; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003515.
 PR 22-FEB-2000; 2000WO-US00414.
 PR 24-FEB-2000; 2000WO-US005004.
 PR 02-MAR-2000; 2000WO-US005841.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US01042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023248.
 PR 18-SEP-2000; 2000US-00663350.
 XX (GETH) GENENTECH INC.
 XX
 PI Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N; Goddard A; PR 0245
 PI Filveroff B, Fong S, Gao W, Gerber H, Gerritsen ME, Hillian KJ, Kjavik IJ; PR 0245
 PI Godowski PJ, Grimaldi JC, Gurney AL, Mather JP, Pan J, Paoni NF, Roy MA, Williams PM, Wood WI; PR 0245
 XX DR; WPI; 2003-331495/31.
 DR N-PSDB; ACA05510.
 XX
 PT Sixty one isolated nucleic acids encoding a PRO polypeptide, e.g. PRO245
 PT or PRO186, useful in chromosome and gene mapping, in generating
 PT antisense RNA and DNA, and in treating cancer and Alzheimer's disease.
 XX
 PS Example 39; Fig 86; 481pp; English.
 CC The invention relates to sixty one nucleic acids encoding PRO
 CC polypeptides (secreted and transmembrane). The polynucleotide is useful
 CC in molecular biology, including uses as hybridisation probes, in
 CC chromosome and gene mapping, in generating antisense RNA and DNA, and in
 CC gene therapy. The polynucleotide may also be used in preparing PRO
 CC polypeptides by recombinant techniques, and in generating either
 PR 28-OCT-1997; 97US-0063121P.
 PR 28-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063128P.
 PR 27-OCT-1997; 97US-0063327P.
 PR 24-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-0063341P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.

CC transgenic animals or knock-out animals which, in turn, are useful in the development and screening of therapeutically useful reagents. The PRO polypeptide or the antibody is used in preparing a medicament for treating a condition responsive to the polypeptide or antibody, such as mucosal lesions e.g. ulcers and enterocolitis, skin disease e.g. psoriasis, cancer e.g. lung cancer and colon cancer, nerve cell disease e.g. Alzheimer's disease and Parkinson's disease, Usher syndrome, rheumatoid arthritis, ischaemia, angiogenesis, inflammatory disease e.g. asthma and present sequence represents the amino acid sequence of a PRO polypeptide sequence 713 AA;
 XX SQ Score 75.5%; DB 6; Length 713;
 CC Best Local Similarity 60.0%; Pred. No. 1e-02;
 CC Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
 CC XX
 Query 1 HSFGVAVSE 10
 Database 135 HSFAGLQL 144
 RESULT 41
 ABO14306
 ID ABO14306 Standard; protein; 713 AA.
 XX
 DE Human secreted / transmembrane polypeptide PRO293.
 XX Human; gene therapy; tumour; tissue typing; obesity; arthritis; diabetes;
 KW hypoinsulinaemia; hyperinsulinaemia; vascular permeability;
 KW cardiac insufficiency disorder; immune response; regeneration; cartilage;
 KW auditory hair cell; hearing loss; bone disorder; sports injury.
 XX Homo sapiens.
 XX US200303660-A1.
 XX DT 25-AUG-2003 (first entry)
 XX XX
 DE Human secreted / transmembrane polypeptide PRO293.
 XX Human; gene therapy; tumour; tissue typing; obesity; arthritis; diabetes;
 KW hypoinsulinaemia; hyperinsulinaemia; vascular permeability;
 KW cardiac insufficiency disorder; immune response; regeneration; cartilage;
 KW auditory hair cell; hearing loss; bone disorder; sports injury.
 XX OS Homo sapiens.
 XX PN US200303660-A1.
 XX XX
 PD 20-FEB-2003.
 XX XX
 PP 12-JUL-2001; 2000US-00904859.
 XX XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 21-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063127P.
 PR 24-OCT-1997; 97US-0063327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 24-OCT-1997; 97US-0063341P.
 PR 28-OCT-1997; 97US-0063542P.
 PR 28-OCT-1997; 97US-0063549P.
 PR 28-OCT-1997; 97US-0063550P.
 PR 28-OCT-1997; 97US-0063564P.

PR	29-OCT-1997;	97US-0063435P.	DR	N-PSDB; ACD20207.
PR	29-OCT-1997;	97US-0063704P.	XX	
PR	29-OCT-1997;	97US-0063732P.	PT	Novel secreted and transmembrane polypeptide for modulating biological activity of cell expressing the polypeptide, identifying agonists or antagonists of polypeptide, and as molecular weight markers.
PR	29-OCT-1997;	97US-0063734P.	PT	
PR	29-OCT-1997;	97US-0063735P.	PT	
PR	29-OCT-1997;	97US-0063738P.	XX	
PR	29-OCT-1997;	97US-0064215P.	XX	
PR	31-OCT-1997;	97US-0063870P.	PS	Claim 12; Fig 86; 469pp; English.
PR	31-OCT-1997;	97US-0064103P.	XX	The invention relates to an isolated, secreted and transmembrane polypeptide, termed PRO polypeptide. The polypeptide is useful for identifying agonists or antagonists of the polypeptide, for preparing variants of the polypeptide, as molecular weight markers for protein electrophoresis purpose and the nucleic acid is useful for recombinantly expressing those markers. The polypeptide is also useful as therapeutic agent. PRO is useful in assays to identify other proteins or molecules involved in binding interaction. The nucleic acid is useful as hybridisation probes, in chromosome and gene mapping, in generation of antisense RNA and DNA, in the preparation of PRO polypeptide, for generating transgenic animals or knockout animals which in turn are useful in the development and screening of therapeutically useful reagents. To construct hybridisation probes for mapping the gene which encodes the PRO and for the genetic analysis of individuals with genetic disorders, in gene therapy, for chromosome analysis, as chromosome marker, and for generating probes for polymerase chain reaction (PCR), Northern analysis, Southern analysis and Western analysis. PRO antibody is useful in diagnostic assays for PRO, e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The polypeptide or its antibody is useful for the preparation of medicament for treating conditions which is responsive to the PRO polypeptide or anti-PRO antibody. G. tumour. The polypeptide and the nucleic acid is useful for tissue typing. The polypeptide is useful for treating obesity, diabetes or hypo- or hyper-insulinaemia and cardiac insufficiency disorders, for inhibiting tumour growth, enhances vascular permeability and immune response, for inducing regeneration of auditory hair cells and for treating hearing loss in mammals and for treating bone and/or cartilage disorders such as sports injuries and arthritis. The present sequence represents the amino acid sequence of a human secreted and transmembrane PRO polypeptide.
PR	03-NOV-1997;	97US-0064248P.	XX	Sequence 713 AA;
PR	07-NOV-1997;	97US-0064809P.	Query Match	Score 37;
PR	12-NOV-1997;	97US-0065196P.	Best Local Similarity	75.5%;
PR	17-NOV-1997;	97US-00653846P.	Matches	6;
PR	18-NOV-1997;	97US-0065693P.	Conservative	60.0%;
PR	21-NOV-1997;	97US-0066120P.	Mismatches	4;
PR	21-NOV-1997;	97US-00664103P.	Indels	0;
PR	24-NOV-1997;	97US-0066453P.	Gaps	0;
PR	24-NOV-1997;	97US-0066466P.		
PR	24-NOV-1997;	97US-0066511P.		
PR	24-NOV-1997;	97US-0066770P.		
PR	24-NOV-1997;	97US-0066772P.		
PR	25-NOV-1997;	97US-0066840P.		
PR	12-DEC-1997;	97US-0069425P.		
PR	04-JUN-1998;	98US-0094802P.	QY	1 HSFGVASYE 10
PR	10-SEP-1998;	98US-0094803P.		: : : :
PR	14-SEP-1998;	98US-0094804P.	Db	135 HSFLAGLSQL 144
PR	14-SEP-1998;	98US-0100262P.		
PR	14-SEP-1998;	98US-01019177.		
PR	16-SEP-1998;	98US-01019330.		
PR	17-SEP-1998;	98US-0100858P.		
PR	17-SEP-1998;	98US-01019437.		
PR	13-OCT-1998;	98US-0104080P.		
PR	20-NOV-1998;	98US-0109304P.		
PR	01-DEC-1998;	98US-0105108.		
PR	22-DEC-1998;	98US-0113296P.		
PR	07-JUL-1999;	99US-0143048P.		
PR	26-JUL-1999;	99US-0145698P.		
PR	08-SEP-1999;	99US-0146222P.		
PR	13-SEP-1999;	99US-0120594.		
PR	15-SEP-1999;	99W0-US021090.		
PR	05-OCT-1999;	99W0-US021547.		
PR	30-NOV-1999;	99W0-US028313.		
PR	01-DEC-1999;	99W0-US028301.		
PR	02-DEC-1999;	99W0-US028564.		
PR	02-DEC-1999;	99W0-US028565.		
PR	16-DEC-1999;	99W0-US030095.		
PR	20-DEC-1999;	99W0-US030911.		
PR	05-JAN-2000;	2000WO-US000219.		
PR	11-FEB-2000;	2000WO-US003565.		
PR	22-FEB-2000;	2000WO-US00414.		
PR	24-FEB-2000;	2000WO-US005004.		
PR	02-MAR-2000;	2000WO-US005841.		
PR	20-MAR-2000;	2000WO-US007377.		
PR	30-MAR-2000;	2000WO-US008439.		
PR	02-JUN-2000;	2000WO-US014042.		
PR	28-JUL-2000;	2000WO-US015264.		
PR	24-AUG-2000;	2000WO-US020710.		
PR	18-SEP-2000;	2000WO-US023328.		
PR	18-SEP-2000;	2000US-00665350.		
XX	(GETH) GENENTECH INC.			
XX			OS	Homo sapiens.
PI	Ashkenazi A,	Botstein D,	XX	Location/Qualifiers
PI	Filvaroff E,	Desnoyers L,	XX	Key
PI	Godowski PJ,	Eaton DL,	XX	Domain
PI	Mather JP,	Ferrara N;	XX	Domain
PI	Pi Williams PM,	Geller H,	XX	Domain
PI	Paoni NF,	Garrison ME,	XX	Domain
PI	Wood WI;	Goddard A;	XX	Domain
XX		Klajvin IJ;	XX	Domain
DR		Tomas D;	XX	Domain
WPI	2003-417923/39.	Stewart TA,	XX	Domain

PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069420P.
 PR 04-JUN-1998; 98US-0088020P.
 PR 10-SEP-1998; 98US-0098030P.
 PR 10-SEP-1998; 98WO-US018824.
 PR 14-SEP-1998; 98US-010262P.
 PR 14-SEP-1998; 98WO-US01977.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-010085P.
 PR 17-SEP-1998; 98WO-US019337.
 PR 13-OCT-1998; 98US-010400P.
 PR 20-NOV-1998; 98US-0109304P.
 PR 01-DEC-1998; 98WO-US025408.
 PR 22-DEC-1998; 98US-011326P.
 PR 07-JUL-1999; 99US-014308P.
 PR 26-JUL-1999; 99US-014563P.
 PR 28-JUL-1999; 99US-014622P.
 PR 08-SEP-1999; 99WO-US020394.
 PR 13-SEP-1999; 99WO-US02044.
 PR 15-SEP-1999; 99WO-US021190.
 PR 15-SEP-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023109.
 PR 29-NOV-1999; 99WO-US028214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028364.
 PR 02-DEC-1999; 99WO-US028365.
 PR 16-DEC-1999; 99WO-US030935.
 PR 20-DEC-1999; 99WO-US030911.
 PR 05-JAN-2000; 2000WO-US03099.
 PR 05-JAN-2000; 2000WO-US00219.
 PR 22-FEB-2000; 2000WO-US003565.
 PR 24-FEB-2000; 2000WO-US00414.
 PR 02-MAR-2000; 2000WO-US00504.
 PR 20-MAR-2000; 2000WO-US007377.
 PR 30-MAR-2000; 2000WO-US008439.
 PR 22-MAY-2000; 2000WO-US01042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 24-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00665350.
 XX (GETH) GENENTECH INC.
 PA PI Ashkenazi A, Borstein D, Desnoyers L, Eaton DL, Ferrara N, Goddard A;
 PA PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Klijaviv IJ;
 PA PI Godowski PJ, Grimaldi JC, Gurney AL, Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Tomas D;
 PA PI Williams PM, Wood WI;
 XX DR WPI; 2003-341586/32.
 XX DR N-PSDB; ACA55010.
 PS Claim 12; Fig 86; 473pp; English.
 XX
 CC The invention describes sixty one nucleic acids encoding PRO polypeptides (secreted and transmembrane). The PRO polypeptides and nucleic acids are useful in diagnosing or treating enterocolitis, gastrointestinal ulceration, skin diseases associated with abnormal keratinocyte differentiation, e.g. psoriasis or epithelial cancers such as squamous cell carcinoma, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, inflammatory diseases, e.g. rheumatoid arthritis, asthma or multiple sclerosis, organ failure, atherosclerosis, cariac injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's disease.
 CC New PRO polypeptides and nucleic acid molecules, useful in diagnosing or treating inflammatory diseases, organ failure, atherosclerosis, cardiac injury, infertility, cancer, AIDS, Alzheimer's disease or Parkinson's disease.
 PR The invention describes sixty one nucleic acids encoding PRO polypeptides (secreted and transmembrane). The PRO polypeptides and nucleic acids are useful in diagnosing or treating enterocolitis, gastrointestinal ulceration, skin diseases associated with abnormal keratinocyte differentiation, e.g. psoriasis or epithelial cancers such as squamous cell carcinoma, Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, inflammatory diseases, e.g. rheumatoid arthritis, asthma or multiple sclerosis, organ failure, atherosclerosis, cariac injury, infertility, birth defects, premature aging, AIDS, cancer, diabetic complications, or mutations in general. The polypeptides are also useful for wound repair and associated therapies concerned with re-growth of tissue. The PRO polypeptides and nucleic acid molecules are also useful in gene therapy, and as molecular weight markers for protein electrophoresis purposes. The anti-PRO antibodies may be used in diagnostic assays for PRO, or for the affinity purification of PRO from recombinant cell culture or natural sources. This is the amino acid sequence of a novel human PRO polypeptide
 CC sequence 713 AA;
 SQ Query Match 75.5%; Score 37; DB 6; Length 713;
 CC Best Local Similarity 60.0%; Pred. No. 1e+02; Mismatches 0; Indels 0; Gaps 0;
 CC Matches 6; Conservative 4;
 XX Qy 1 HSFGVAVSE 10
 AC |||:|||:
 DB 135 HSFGVAVSE 10
 RESULT 44
 AB014845 standard; protein; 713 AA.
 XX ID AB014845;
 AC AB014845;
 AC AC AB014845;
 DT 22-AUG-2003 (first entry)
 XX DB Human secreted / transmembrane polypeptide PRO293.
 XX Human; ss; Gene therapy; apoptosis; bleeding; tumour; ALS;
 KW Gynaecological disease; hysterectomy; angiogenesis; skin disease;
 KW coronary ischaemic condition; gastrointestinal mucosa disorder; asthma;
 KW mucosal lesion repair; keratinocyte differentiation; psoriasis;
 KW Parkinson's disease; Alzheimer's disease; amyotrophic lateral sclerosis;
 KW neuropathy; blood coagulation cascade disorder; thrombosis; haemorrhage;
 KW neurodegenerative disease; endometrial bleeding; wound healing;
 KW tissue repair; rheumatoid arthritis; multiple sclerosis; tissue typing.
 XX OS Homo sapiens.
 XX US2003027143-A1.
 XX PD 06-FEB-2003.
 XX PF 16-JUL-2001; 2001US-00906838.
 XX PN US2003027143-A1.
 XX PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059124P.
 PR 18-SEP-1997; 97US-0059233P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 21-OCT-1997; 97US-006346P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063121P.
 PR 27-OCT-1997; 97US-006327P.
 PR 27-OCT-1997; 97US-0063329P.
 PR 28-OCT-1997; 97US-006351P.
 PR 28-OCT-1997; 97US-006352P.
 PR 28-OCT-1997; 97US-006354P.
 PR 28-OCT-1997; 97US-006356P.
 PR 28-OCT-1997; 97US-006355P.
 PR 29-OCT-1997; 97US-006345P.

PR 29-OCT-1997; 97US-0063704P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0063734P.
 PR 29-OCT-1997; 97US-0064215P.
 PR 29-OCT-1997; 97US-0063870P.
 PR 31-OCT-1997; 97US-0064101P.
 PR 03-NOV-1997; 97US-0064244P.
 PR 07-NOV-1997; 97US-0064803P.
 PR 12-NOV-1997; 97US-0065186P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066453P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-00666770P.
 PR 24-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 25-NOV-1997; 97US-0066925P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-009903P.
 PR 14-SEP-1998; 98WO-US0100824.
 PR 14-SEP-1998; 98US-0100062P.
 PR 14-SEP-1998; 98WO-US019177.
 PR 16-DEC-1998; 98WO-US013330.
 PR 17-SEP-1998; 98US-0100058P.
 PR 17-SEP-1998; 98WO-US014437.
 PR 13-OCT-1998; 98US-010480P.
 PR 20-NOV-1998; 98US-010904P.
 PR 01-DEC-1998; 98WO-US02108.
 PR 22-DEC-1998; 98US-011396P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-014598P.
 PR 08-SEP-1999; 99US-0146222P.
 PR 13-SEP-1999; 99WO-US020594.
 PR 15-SEP-1999; 99WO-US020944.
 PR 15-OCT-1999; 99WO-US021547.
 PR 05-OCT-1999; 99WO-US023089.
 PR 20-DEC-1999; 99WO-US023214.
 PR 30-NOV-1999; 99WO-US028313.
 PR 01-DEC-1999; 99WO-US028301.
 PR 02-DEC-1999; 99WO-US028564.
 PR 16-DEC-1999; 99WO-US028565.
 PR 20-MAR-2000; 2000WO-US03095.
 PR 30-MAR-2000; 2000WO-US030911.
 PR 05-JAN-2000; 2000WO-US030999.
 PR 11-FEB-2000; 2000WO-US03565.
 PR 22-FEB-2000; 2000WO-US03565.
 PR 24-FEB-2000; 2000WO-US034414.
 PR 02-MAR-2000; 2000WO-US03504.
 PR 20-MAR-2000; 2000WO-US035841.
 PR 22-MAR-2000; 2000WO-US007377.
 PR 22-MAY-2000; 2000WO-US014042.
 PR 02-JUN-2000; 2000WO-US015264.
 PR 28-JUL-2000; 2000WO-US020710.
 PR 18-AUG-2000; 2000WO-US023328.
 PR 18-SEP-2000; 2000US-00655350.
 XX (GUTH) GENENTECH INC.

XX Ashkenazi A, Botstein D, Desnoyers L, Eaton DL, Ferrara N, Gerritsen ME, Goddard A;
 PI Filovaroff E, Fong S, Gao W, Gerber H, Hillan KJ, Kljavin IJ;
 PI Godowski PJ, Grimaldi JC, Gurley AL, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Thomas D;
 PI Williams PM, Wood WI;
 DR WPI; 2003-417249/39.
 N-PSDB; ACD19845.

XX Novel secreted and transmembrane polypeptides and polynucleotides encoding them useful for treating abnormal bleeding involved in synecological diseases, skin diseases and neurodegenerative diseases.
 XX
 PS Claim 12; Fig 86; 467pp; English.
 XX
 CC The invention relates to an isolated secreted and transmembrane PRO polypeptide. The PRO polypeptides are useful for modulating biological activity of a cell, in diagnosing or treating abnormal bleeding involved in gynaecological diseases e.g. to avoid or lessen the need for hysterectomy, for creating angiogenesis, tumour, coronary ischaemic condition, disorders associated with the preservation and maintenance of gastrointestinal mcosa and the repair of acute and chronic mucosal lesions, skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's disease, amyotrophic lateral sclerosis (ALS), neuropathies, disease related to uncontrolled cell growth (e.g. cancer), blood coagulation cascade disorders, neurodegenerative disease, thrombosis, haemorrhage, endometrial bleeding, wound healing, tissue repair, asthma, rheumatoid arthritis, multiple sclerosis. Nucleic acid encoding PRO polypeptides are useful in molecular biology including uses as hybridisation probes and in the generation of antisense RNA and DNA, for preparing PRO Polypeptides, for generating transgenic animals or knockout animals. The PRO polypeptides and their nucleic acids are useful for tissue typing. PRO antibodies are useful for immunohistochemical staining and/or assay of sample fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The present sequence represents the amino acid sequence of a human secreted and transmembrane PRO polypeptide.
 SQ Sequence 713 AA;
 Query Match Score 37; DB 6;
 Best Local Similarity Pred. No. 1e+02;
 Matches 4; Mismatches 0; Indels 0; Gaps 0;
 QY 1 HSFSGVASVE 10
 Db 135 HSFLAGSLQ 144
 RESULT 45
 ADB29450 standard; protein; 713 AA.
 ID ADB29450
 AC ADB29450;
 DT 20-NOV-2003 (first entry)
 XX Human secreted/transmembrane protein, #46.
 DE Human; PRO; secreted; transmembrane; gastrointestinal mucosa;
 XX KW mucosal lesion; skin disease; keratinocyte differentiation; psoriasis;
 KW Parkinson's disease; Alzheimer's disease; amyotrophic lateral sclerosis;
 KW ALS; neuropathy; cell growth; cancer; tumour; viral infection;
 KW neurodegenerative disease; antithrombotic agent; haemorrhage;
 KW endometrial bleeding; angiogenesis; kidney tissue; apoptosis; therapeutic;
 KW tissue typing; immunohistochemical staining; gene therapy; nootropic;
 KW neuroprotective; cytostatic; virucide; antiocoagulant.
 XX Homo sapiens.
 OS US2003039202-A1.
 XX PN
 XX PD 15-MAY-2003.
 XX PF 10-JUL-2001; 2001US-00902615.
 XX PR 17-SEP-1997; 97US-0059113P.
 XX PR 17-SEP-1997; 97US-0059115P.
 XX PR 17-SEP-1997; 97US-0059117P.

CC diagnostic assays for PRO e.g. detecting its expression in specific
 CC cells, tissues or serum and for affinity purification of PRO from
 CC recombinant cell culture or natural sources. The PRO genes may also be
 CC used in gene therapy, particularly for replacing a defective gene. The
 CC sequence presented is a PRO polynucleotide of the invention.
 XX Sequence 713 AA;

Query Match 75.5%; Score 37; DB 6; Length 713;
 Best Local Similarity 60.0%; Pred. No. 1e+02;
 Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;

Qy 1 HSFSGVASVE 10
 Db 135 HSPAGLASLQ 144

RESULT 46
 ID ABU62147 standard; protein; 713 AA.
 XX AC ABU62147;
 DT 25-AUG-2003 (first entry)
 XX DE Tumour-associated antigenic target TAT292.
 XX Human; TAT292; cancer; tumour-associated antigenic target; TAT;
 KW breast cancer; ovarian cancer; uterine cancer; tumour; ADEPT; prodrug;
 KW antibody dependent enzyme mediated prodrug therapy.
 XX OS Homo sapiens.
 XX Key Location/Qualifiers
 PT 1..18 /label= Signal_sequence
 PT Modified-site 15..20 /label= N-myristoylation_site
 PT Protein 19..713 /label= Nature_TAT292
 PT Domain 28..68 /label= Leucine_rich_repeat_N-terminal_domain
 PT Region 70..93 /label= Leucine_rich_repeat
 PT Region 94..117 /label= Leucine_rich_repeat
 PT Modified-site 94..97 /note= "Asn is N-glycosylated"
 PT Region 118..141 /label= Leucine_rich_repeat
 PT Region 142..165 /label= Leucine_rich_repeat
 PT Region 166..189 /label= Leucine_rich_repeat
 PT Region 190..213 /label= Leucine_rich_repeat
 PT Region 214..237 /label= Leucine_rich_repeat
 PT Region 238..261 /label= Leucine_rich_repeat
 PT Region 262..285 /label= Leucine_rich_repeat
 PT Region 286..310 /label= Leucine_rich_repeat
 PT Region 311..335 /label= Leucine_rich_repeat
 PT Region 336..359 /label= Leucine_rich_repeat
 PT Domain 369..421 /label= Leucine_rich_repeat
 PT Modified-site 384..398 /note= "Asn is N-glycosylated"
 PT Domain 438..499

FT FT /label= Immunoglobulin_domain
 FT FT 470..473
 FT FT /label= Amidation_site
 FT FT 485..488
 FT FT /note= "cAMP and cGMP dependent phosphorylation site"
 SQ FT FT 493..498
 FT FT /label= N-myristoylation_site
 FT FT 532..539
 FT FT /label= Tyrosine_kinase_phosphorylation_site
 FT FT 555..558
 FT FT /note= "Asn is N-glycosylated"
 FT FT 566..571
 FT FT /label= N-myristoylation_site
 FT FT 583..586
 FT FT /note= "Asn is N-glycosylated"
 FT Domain 628..648
 FT FT /label= Transmembrane_domain
 FT FT 660..663
 FT FT /label= Amidation_site
 FT Domain 667..687
 FT FT /label= Transmembrane_domain
 FT FT 692..695
 FT FT /label= Amidation_site
 XX PN US2003039648-A1.
 XX PD 27-FEB-2003.
 XX PP 2002US-00125166.
 XX PR 17-APR-2002; 2002US-00125166.
 XX PR 15-SEP-1998; 98WO-US019330.
 XX PR 08-MAR-1999; 99WO-US005028.
 XX PR 15-SEP-1999; 99WO-US021090.
 XX PR 18-FEB-2000; 2000WO-US004341.
 XX PR 18-SEP-2000; 2000WO-US0065350.
 XX PR 24-FEB-2001; 2001WO-US006520.
 XX PR 13-JUL-2001; 2001US-0094553.
 XX PR 30-JUL-2001; 2001US-00918985.
 XX (GETH) GENENTECH INC.
 XX PA Goddard A, Gurney AL, Polakis P, Smith V, Wood WI, Wu TD;
 XX PI Zhang Z;
 XX DR WPI; 2003-492150/46.
 XX DR N-PDB; ACA62803.
 XX PT Killing cancer cells (e.g. breast cancer cells), particularly for
 PT treating or preventing tumors in mammals, by contacting the cancer cells
 PT with an inhibitor (e.g. antibody) of a tumor-associated antigenic target
 PT (TAT) polypeptide.
 XX Claim 1; Fig 4; 74pp; English.
 XX The invention relates to a method of killing a cancer cell, which
 CC expresses a tumour-associated antigenic target (TAT) polypeptide, which
 CC comprises contacting the cancer cell with an antibody, oligopeptide or
 CC organic molecule that binds to the TAT polypeptide on the cancer cell,
 CC thus killing the cancer cell. The method is useful for killing cancer
 CC cells, particularly breast, ovarian or uterine cancer cells. The method
 CC is particularly useful for inhibiting the growth of, treating or
 CC preventing tumours or cancers in mammals. This method is also useful for
 CC diagnosing the presence of tumours. The anti-TAT antibodies may also be
 CC used in Antibody Dependent Enzyme Mediated Prodrug Therapy (ADEPT) by
 CC conjugating the antibody to a prodrug activating enzyme, which converts a
 CC prodrug (e.g. a peptidyl chemotherapeutic agent) to an active anti-cancer
 CC drug. The present sequence represents the amino acid sequence of tumour-
 CC associated antigenic target, TAT292
 XX Sequence 713 AA;
 SQ Query Match 75.5%; Score 37; DB 6; Length 713;

Best Local Similarity 60.0%; Pred. No. 1e+02; Mismatches 4; Indels 0; Gaps 0;

Matches 6; Conservative

Qy 1 HSFEGVASYVE 10
|||:|||:
Db 135 HSFAGLASHQ 144

RESULT 47

ID ADA18306 standard; protein; 713 AA.

XX DT 20-NOV-2003 (first entry)

AX Human secreted/transmembrane protein, #46.

DE Human secreted/transmembrane protein, #46.

KW PRO; secreted; transmembrane; gastrointestinal mucosa;

KW mucosal lesion; skin disease; keratinocyte differentiation; psoriasis;

KW Parkinson's disease; Alzheimer's diseases; amyotrophic lateral sclerosis;

KW AUS; neuropathy; cell growth; cancer; tumour; viral infection;

KW neurodegenerative disease; antithrombotic agent; haemorrhage;

KW endometrial bleeding angiogenesis; kidney tissue; apoptosis; therapeutic;

KW tissue typing; immunohistochemical staining; gene therapy; nootropic;

KW neuroprotective; cytosatic; virucide; anticoagulant.

XX OS Homo sapiens.

XX PN US2003039971-A1.

AX PD 27-FEB-2003.

XX PF 16-JUL-2001; 2001US-00906446.

XX PR 17-SEP-1997; 97US-0059113P.

PR 17-SEP-1997; 97US-0059115P.

PR 17-SEP-1997; 97US-0059117P.

PR 17-SEP-1997; 97US-0059119P.

PR 17-SEP-1997; 97US-0059121P.

PR 17-SEP-1997; 97US-0059122P.

PR 17-SEP-1997; 97US-0059184P.

PR 18-SEP-1997; 97US-0059163P.

PR 18-SEP-1997; 97US-0059166P.

PR 15-OCT-1997; 97US-0059125P.

PR 11-OCT-1997; 97US-0062285P.

PR 17-OCT-1997; 97US-0062287P.

PR 21-OCT-1997; 97US-00631486P.

PR 24-OCT-1997; 97US-0062814P.

PR 24-OCT-1997; 97US-0062816P.

PR 24-OCT-1997; 97US-0063045P.

PR 24-OCT-1997; 97US-0063120P.

PR 24-OCT-1997; 97US-0063121P.

PR 24-OCT-1997; 97US-0063127P.

PR 24-OCT-1997; 97US-0063128P.

PR 27-OCT-1997; 97US-0063327P.

PR 27-OCT-1997; 97US-0063329P.

PR 28-OCT-1997; 97US-0063435P.

PR 29-OCT-1997; 97US-0063541P.

PR 29-OCT-1997; 97US-0063542P.

PR 29-OCT-1997; 97US-0063532P.

PR 29-OCT-1997; 97US-0063544P.

PR 28-OCT-1997; 97US-0063549P.

PR 28-OCT-1997; 97US-0063550P.

PR 29-OCT-1997; 97US-0063564P.

PR 29-OCT-1997; 97US-0063435P.

PR 29-OCT-1997; 97US-0063704P.

PR 29-OCT-1997; 97US-0063704P.

PR 29-OCT-1997; 97US-0063734P.

PR 29-OCT-1997; 97US-0063734P.

PR 29-OCT-1997; 97US-0063735P.

PR 29-OCT-1997; 97US-0063738P.

PR 29-OCT-1997; 97US-0064215P.

PR 31-OCT-1997; 97US-0063870P.

PR 31-OCT-1997; 97US-0064103P.

PR 03-NOV-1997; 97US-0064248P.

PR 07-NOV-1997; 97US-0064809P.

PR 12-NOV-1997; 97US-0065186P.

PR 17-NOV-1997; 97US-0065166P.

PR 18-NOV-1997; 97US-0065633P.

PR 21-NOV-1997; 97US-0066120P.

PR 21-NOV-1997; 97US-0066349P.

PR 24-NOV-1997; 97US-0066433P.

PR 24-NOV-1997; 97US-0066466P.

PR 24-NOV-1997; 97US-0066511P.

PR 24-NOV-1997; 97US-0066770P.

PR 24-NOV-1997; 97US-0066772P.

PR 25-NOV-1997; 97US-0066840P.

PR 12-DEC-1997; 97US-0069455P.

PR 04-JUN-1998; 98US-0088046P.

PR 10-SEP-1998; 98US-009803P.

PR 10-SEP-1998; 98US-018824.

PR 14-SEP-1998; 98US-0100262P.

PR 14-SEP-1998; 98WO-US019177.

PR 16-SEP-1998; 98WO-US019330.

PR 17-SEP-1998; 98US-010058P.

PR 17-SEP-1998; 98US-01019437.

PR 13-OCT-1998; 98US-010408P.

PR 01-DEC-1998; 98US-0109304P.

PR 01-DEC-1998; 98WO-US025108.

PR 22-DEC-1998; 98US-0113236P.

PR 07-JUL-1999; 99US-0143048P.

PR 26-JUL-1999; 99US-0145688P.

PR 28-JUL-1999; 99US-0146222P.

PR 08-SEP-1999; 99WO-US020594.

PR 13-SEP-1999; 99WO-US020944.

PR 15-SEP-1999; 99WO-US021090.

PR 15-SEP-1999; 99WO-US021547.

PR 05-OCT-1999; 99WO-US023089.

PR 29-NOV-1999; 99WO-US028114.

PR 30-NOV-1999; 99WO-US028313.

PR 01-DEC-1999; 99WO-US028301.

PR 02-DEC-1999; 99WO-US028564.

PR 02-DEC-1999; 99WO-US028565.

PR 16-DEC-1999; 99WO-US030995.

PR 20-DEC-1999; 99WO-US030911.

PR 20-DEC-1999; 99WO-US03099.

PR 05-JAN-2000; 2000WO-US000219.

PR 11-FEB-2000; 2000WO-US003565.

PR 22-FEB-2000; 2000WO-US00414.

PR 24-FEB-2000; 2000WO-US005004.

PR 02-MAR-2000; 2000WO-US005841.

PR 20-MAR-2000; 2000WO-US00737.

PR 30-MAR-2000; 2000WO-US008439.

PR 22-MAY-2000; 2000WO-US014042.

PR 02-JUN-2000; 2000WO-US01524.

PR 26-JUL-2000; 2000WO-US020710.

PR 24-AUG-2000; 2000WO-US023328.

PR 18-SEP-2000; 2000US-00665350.

XX (GETH) GENENTECH INC.

PA DR 2003-503392/47.

PI Ashkenazi A, Botstein D, Destroyer L, Ferrara DL, Eaton DL, Goddard A, Gerritsen ME, Gerber H, Kijaviv IJ, Williams PM, Wood WI;

PI Filvaroff E, Fong S, Gao W, Grimaldi JC, Gurley AL, Hillian JW, Stewart TA,

PI Godowski P, Pan J, Paoni NF, Roy MA,

PI Mather JP, Williams PM,

PI PI

PT New secreted and transmembrane polypeptides useful for treating skin, neurodegenerative diseases, asthma, rheumatoid arthritis, psoriasis and multiple sclerosis.

XX Claim 12; SEQ ID NO 245; 471pp; English.

CC The invention discloses isolated PRO secreted/transmembrane polypeptides and the nucleic acid encoding them. The polypeptides can be used to raise

CC

antibodies that specifically bind to the PRO polypeptide, for linking a bioactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. PRO polypeptides are useful for detecting other PRO polypeptides in a sample and for linking a bioactive molecule to a cell expressing a PRO polypeptide. The PRO polypeptide antibodies are useful for modulating the biological activity of a cell expressing PRO polypeptides. PRO polypeptides are also useful for treating disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions. Skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's diseases, amyotrophic lateral sclerosis (ALS), neuropathies and additionally, disease related to uncontrolled cell growth, e.g. cancer. PRO polypeptides also serve as tumour specific antigens which may be exploited as therapeutic targets for anti-tumour drugs, and are also employed therapeutically in vivo for lessening the effects of viral infection. The PRO polypeptides can be also used in assays to determine if it has a role in neurodegenerative diseases or their reversal, as an antithrombotic agent with reduced risk for haemorrhage as compared with heparin, in treating other PRO-associated disorders, endometrial bleeding angiogenesis, and may also have an effect on kidney tissue. PRO polypeptides and their portions affect the expression of genes which have a role in apoptosis. The polynucleotides are useful in molecular biology including uses as hybridisation probes for cDNA library to isolate the full-length PRO cDNA or to isolate other cDNAs, in chromosome and gene mapping, in the generation of antisense RNA and DNA, for preparing PRO polypeptides, for generating transgenic animals or knockout animals which are useful in the development and screening of therapeutically useful reagents, as probes and for the genetic analysis of individuals with genetic disorders as well as for recombinantly expressing the protein and for chromosome identification. The proteins are useful as molecular marker for protein electrophoresis purposes, as therapeutic agents, for screening compounds to identify those that mimic the PRO polypeptide (agonists) or prevent the effect of the PRO polypeptide (antagonists). The polynucleotides and proteins are useful for tissue typing. PRO antibodies are useful for immunohistochemical staining and/or assay of sample fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The sequence presented is a PRO Polynucleotide of the invention.

Sequence 713 AA;
Query Match
75.5%; Score 37; DB 6; Length 713;

Mismatches 4; Indels 0; Gaps 0;

1 HSFSGVASVE 10
135 HSFAGLASLQ 144

ABC032797;	PR	04-JUN-1998;	98US-008B02EP.
	PR	10-JUN-1998;	98US-0099803P.
	PR	10-SEP-1998;	98WO-US018844.
	PR	14-SEP-1998;	98US-0100262P.
	PR	14-SEP-1998;	98WO-US019177.
	PR	16-SEP-1998;	98WO-US019310.
	PR	17-SEP-1998;	98US-010854P.
	PR	17-SEP-1998;	98WO-US019437.
	PR	13-OCT-1998;	98US-0104080P.
	PR	20-NOV-1998;	98US-0101930P.
	PR	01-DEC-1998;	98WO-US025108.
	PR	22-DEC-1998;	98US-0113296P.
	PR	07-JUL-1999;	99US-0140489P.
	PR	26-JUL-1999;	99US-0145698P.
	PR	28-JUL-1999;	99US-0146222P.
	PR	04-SEP-1999;	99WO-US0100954.
17-SEP-2003 (first entry)			
Human secreted/transmembrane protein PRO293.			
Human; PRO; secreted and transmembrane protein; inflammation; rheumatoid arthritis; psoriasis; multiple sclerosis; atherosclerosis; infertility; birth defect; premature aging; malignancy; cancer; stroke; heart attack; hypertension; gastrointestinal ulceration; Parkinson's disease; Alzheimer's disease; AIDS; cholesterol uptake; wound healing; tissue repair; gene therapy.			
Homo sapiens.			

PR	13-SEP-1999;	99WO-US020944.	XX	Sequence 713 AA;
PR	15-SEP-1999;	99WO-US021040.	SQ	Query Match Similarity 75.5%; Score 37; DB 6; Length 713;
PR	15-SEP-1999;	99WO-US021547.	PR	Best Local Similarity 60.0%; Pred. No. 1e+02;
PR	05-OCT-1999;	99WO-US023049.	Matches	4; Mismatches 0; Indels 0; Gaps 0;
PR	29-NOV-1999;	99WO-US028214.	Qy	1 HSFSGYASVE 10
PR	30-NOV-1999;	99WO-US028313.	Db	135 HSPAGLSQLQ 144
PR	01-DEC-1999;	99WO-US028301.		
PR	02-DEC-1999;	99WO-US028564.		
PR	02-DEC-1999;	99WO-US028565.		
PR	16-DEC-1999;	99WO-US030985.		
PR	20-DEC-1999;	99WO-US030989.		
PR	05-JAN-2000;	2000WO-US000219.		
PR	22-FEB-2000;	2000WO-US004144.	RESULT 49	
PR	24-FEB-2000;	2000WO-US005004.	ID	ABO34857 standard; protein: 713 AA.
PR	02-MAR-2000;	2000WO-US005841.	XX	
PR	20-MAR-2000;	2000WO-US007377.	AC	ABO34857;
PR	30-MAR-2000;	2000WO-US008439.	XX	
PR	22-MAY-2000;	2000WO-US014042.	DT	22-SEP-2003 (first entry)
PR	02-JUN-2000;	2000WO-US015264.	XX	
PR	28-JUL-2000;	2000WO-US020710.	DB	Human PRO polypeptide #42.
PR	24-AUG-2000;	2000WO-US023328.	XX	
PR	18-SEP-2000;	2000WO-US0665350.	KW	Human; PRO; secreted polypeptide; transmembrane polypeptide;
XX	(GBTB) GENENTECH INC.		KW	gynaecological disease; hysterectomy; mucosal lesion;
PA	Ashkenazi A, Borstein D, Desnoyers L, Baton DL, Ferrara N;		KW	coronary ischaemic condition; gastrointestinal mucosa; skin disease; ALS;
PI	Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen MB, Goddard A;		KW	keratinocyte differentiation; psoriasis; Parkinson's disease; asthma;
PI	Godowski PJ, Grimaldi JC, Gurney AL, Klijavinc IJ;		KW	Alzheimer's disease; rheumatoid arthritis; multiple sclerosis; cancer;
PI	Mather JP, Pan J, Peconi NF, Roy MA, Stewart TA,		KW	amyotrophic lateral sclerosis; neuropathy; uncontrolled cell growth.
PI	Williams PM, Wood WI;			
XX	DR			
XX	N-PSDB; ACD6992.		PD	
XX	PS		XX	
PT	New genes and secreted and transmembrane polypeptides (e.g. PRO245 or PRO1868), useful for treating or diagnosing e.g. cancers, atherosclerosis, infertility, stroke, AIDS or multiple sclerosis in mammals.		PP	11-JUL-2001; 2001US-00903786.
PT	Claim 12: Fig 86; 476P; English.		XX	
CC	The invention relates to an isolated nucleic acid molecule comprising a sequence with at least 80% identity to: (a) a nucleotide encoding any of 61 PRO (secreted and transmembrane protein) polypeptides appearing as AB03256-AB032816; or (b) any of 61 nucleotide sequences having 54-4053bp fully defined in the specification; or the full length coding sequence of any these 61 nucleotide sequences. Also included are the isolated PRO polypeptide (lacking its associated signal peptide or an extracellular domain of the PRO polypeptide, with or lacking its associated signal peptide), a vector comprising the nucleic acid molecule, a host cell comprising the vector (used to produce the PRO polypeptide), a chimaeric molecule comprising the PRO polypeptide fused to a heterologous amino acid sequence, an anti-PRO antibody, detecting PRO245 or PRO1868 polypeptides, linking a bioactive molecule to a sample suspected of containing any of these PRO polypeptides, linking a bioactive molecule to a cell expressing a PRO245 or PRO1868 polypeptide and modulating at least one biological activity of a cell expressing the PRO245 or PRO1868 polypeptides. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These are particularly useful for diagnosing or treating e.g. inflammations, rheumatoid arthritis, psoriasis, multiple sclerosis, atherosclerosis, infertility, birth defects, premature aging, malignancy (e.g. cancers), strokes, heart attacks, hypertension, gastrointestinal ulcerations, Parkinson's disease, Alzheimer's disease, or AIDS in mammals. These are also useful for modulating cholesterol uptake in the body, and in wound healing or tissue repair. The PRO polypeptides are useful in drug screening. The PRO polypeptides are also useful as molecular weight markers, or for chromosome identification. The PRO genes are useful as hybridisation probes, or for screening libraries of human cDNA, genomic DNA or mRNA. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The present sequence represents a PRO polypeptide	PR		
CC			PR	17-SEP-1997; 97US-0059113P.
CC			PR	17-SEP-1997; 97US-0059115P.
CC			PR	17-SEP-1997; 97US-0059117P.
CC			PR	17-SEP-1997; 97US-0059121P.
CC			PR	17-SEP-1997; 97US-0059122P.
CC			PR	17-SEP-1997; 97US-0059123P.
CC			PR	17-SEP-1997; 97US-0059124P.
CC			PR	17-SEP-1997; 97US-0059125P.
CC			PR	17-OCT-1997; 97US-0062125P.
CC			PR	17-OCT-1997; 97US-0062285P.
CC			PR	17-OCT-1997; 97US-0062287P.
CC			PR	21-OCT-1997; 97US-0063486P.
CC			PR	24-OCT-1997; 97US-0062814P.
CC			PR	24-OCT-1997; 97US-0062816P.
CC			PR	27-OCT-1997; 97US-0063327P.
CC			PR	27-OCT-1997; 97US-0063329P.
CC			PR	28-OCT-1997; 97US-0063351P.
CC			PR	28-OCT-1997; 97US-0063542P.
CC			PR	29-OCT-1997; 97US-0063704P.
CC			PR	29-OCT-1997; 97US-0063732P.
CC			PR	29-OCT-1997; 97US-006374P.
CC			PR	29-OCT-1997; 97US-006375P.
CC			PR	29-OCT-1997; 97US-006378P.
CC			PR	29-OCT-1997; 97US-0064215P.
CC			PR	31-OCT-1997; 97US-0063870P.

PR 31-OCT-1997; 97US-0064103P.
 PR 07-NOV-1997; 97US-0064248P.
 PR 07-NOV-1997; 97US-0064803P.
 PR 12-NOV-1997; 97US-0065188P.
 PR 17-NOV-1997; 97US-0065846P.
 PR 18-NOV-1997; 97US-0065693P.
 PR 21-NOV-1997; 97US-0066120P.
 PR 21-NOV-1997; 97US-0066364P.
 PR 24-NOV-1997; 97US-0066433P.
 PR 24-NOV-1997; 97US-0066466P.
 PR 24-NOV-1997; 97US-0066511P.
 PR 24-NOV-1997; 97US-0066770P.
 PR 25-NOV-1997; 97US-0066772P.
 PR 25-NOV-1997; 97US-0066840P.
 PR 12-DEC-1997; 97US-0069452P.
 PR 04-JUN-1998; 98US-0088026P.
 PR 10-SEP-1998; 98US-0098033P.
 PR 10-SEP-1998; 98WO-US0188124.
 PR 14-SEP-1998; 98US-0100562P.
 PR 14-SEP-1998; 98WO-US0191177.
 PR 16-SEP-1998; 98WO-US019330.
 PR 17-SEP-1998; 98US-0100888P.
 PR 17-SEP-1998; 98WO-US019437.
 PR 13-OCT-1998; 98US-0104980P.
 PR 01-DEC-1998; 98US-0109304P.
 PR 22-DEC-1998; 98US-0113961P.
 PR 07-JUL-1999; 99US-0143048P.
 PR 26-JUL-1999; 99US-014598P.
 PR 28-JUL-1999; 99US-0146722P.
 PR 13-SEP-1999; 99WO-US020594.
 PR 13-SEP-1999; 99WO-US020944.
 PR 15-SEP-1999; 99WO-US02090.
 PR 15-SEP-1999; 99WO-US021396P.
 PR 05-OCT-1999; 99WO-US021547.
 PR 29-NOV-1999; 99WO-US022089.
 PR 01-DEC-1999; 99WO-US023313.
 PR 02-DEC-1999; 99WO-US023301.
 PR 02-DEC-1999; 99WO-US025564.
 PR 16-DEC-1999; 99WO-US025565.
 PR 20-DEC-1999; 99WO-US03095.
 PR 05-JAN-2000; 99WO-US030999.
 PR 05-JAN-2000; 2000WO-US000219.
 PR 11-FEB-2000; 2000WO-US003565.
 PR 22-MAY-2000; 2000WO-US004414.
 PR 24-FEB-2000; 2000WO-US004414.
 PR 02-MAR-2000; 2000WO-US005004.
 PR 30-MAR-2000; 2000WO-US007377.
 PR 22-MAY-2000; 2000WO-US008439.
 PR 28-JUL-2000; 2000WO-US01264.
 PR 24-AUG-2000; 2000WO-US02328.
 PR 18-SEP-2000; 2000US-00665350.
 XX (GETH) GENENTECH INC.
 PA PI Ashkenazi A, Botstein D, Desnoyers L, Barton DL, Perrara N;
 PI Filvaroff E, Fong S, Gao W, Gerber H, Gerritsen ME, Goddard A;
 PI Godowski PJ, Grimaldi JC, Hillan KJ, Kljavin IJ;
 PI Mather JP, Pan J, Paonni NF, Roy MA, Stewart TA, Tumas D;
 PI Williams PM, Wood WI;
 XX DR WPI; 2003-492256/46.
 DR N-PSDB; ACD81153.
 XX PT Novel secreted and transmembrane PRO polypeptides and polynucleotides
 encoding them, useful for treating abnormal bleeding involved in
 gynaecological diseases, skin diseases and neurodegenerative diseases.
 XX Claim 12; Fig 86; 475pp; English.
 XX PR 31-OCT-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063122P.
 PR 24-OCT-1997; 97US-0063127P.

The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polynucleotides encoding them. The PRO polypeptides and polynucleotides can be used in diagnosing or treating abnormal bleeding involved in gynaecological diseases e.g. to avoid or lessen the need for hysterectomy. They can also be used in treating coronary ischaemic conditions, disorders associated with the preservation and maintenance of gastrointestinal mucosa and the repair of acute and chronic mucosal lesions, skin diseases associated with abnormal keratinocyte differentiation (e.g. psoriasis), Parkinson's disease, Alzheimer's disease, asthma, rheumatoid arthritis, multiple sclerosis, amyotrophic lateral sclerosis (ALS), neuropathies and diseases related to uncontrolled cell growth, such as cancer. Sequences ABO34816-ABO34876 represent human PRO polypeptides of the invention.

Sequence 713 AA:
 SQ CC The invention relates to human PRO polypeptides (secreted and transmembrane polypeptides) and the PRO polynucleotides encoding them.
 CC The PRO polypeptides and polynucleotides can be used in diagnosing or
 CC treating abnormal bleeding involved in gynaecological diseases e.g. to
 CC avoid or lessen the need for hysterectomy. They can also be used in
 CC treating coronary ischaemic conditions, disorders associated with the
 CC preservation and maintenance of gastrointestinal mucosa and the repair of
 CC acute and chronic mucosal lesions, skin diseases associated with abnormal
 CC keratinocyte differentiation (e.g. psoriasis), Parkinson's disease,
 CC Alzheimer's disease, asthma, rheumatoid arthritis, multiple sclerosis,
 CC amyotrophic lateral sclerosis (ALS), neuropathies and diseases related to
 CC uncontrolled cell growth, such as cancer. Sequences ABO34816-ABO34876
 CC represent human PRO polypeptides of the invention.
 XX

Query Match Score 37; DB 6;
 Best Local Similarity 60.0%; Pred. No. 1e+02;
 Matches 4; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 HSFGWASVE 10
 Db 135 HSFGAGLSQ 144

RESULT 50
 ADA16281 Human secreted/transmembrane protein, #46.
 ID ADA16281 standard; protein; 713 AA.
 XX
 XX
 AC ADA16281;
 XX
 DT 06-NOV-2003 (first entry)
 XX
 DE Human secreted/transmembrane protein, #46.
 XX
 KW Human; PRO; secreted; transmembrane; therapeutic; tissue typing;
 KW immunohistochemical staining; gene therapy; neonatal heart;
 KW vascular endothelial growth factor; VEGF; proliferation;
 KW endothelial cell; stimulated T-lymphocyte; retinal neuron;
 KW rod photoreceptor cell; c-fos; glucose; FPA; chondrocyte;
 KW cardiac insufficiency disorder; wound; cancer; tumour; retinal disorder;
 KW retinitis pigmentosum; obesity; diabetes; hyperinsulinaemia;
 KW hypoinsulinaemia; bone disorder; cartilage disorder; sport injury;
 KW arthritis; cardiology; cartilage; ophthalmological;
 KW osteopatric; antiarthritic; anorectic.
 XX
 OS Homo sapiens.
 XX
 PN US2003049621-A1.
 XX
 PD 13-MAR-2003.
 XX
 PP 11-JUL-2001; 2001US-00904119.
 XX
 PR 17-SEP-1997; 97US-0059113P.
 PR 17-SEP-1997; 97US-0059115P.
 PR 17-SEP-1997; 97US-0059117P.
 PR 17-SEP-1997; 97US-0059119P.
 PR 17-SEP-1997; 97US-0059121P.
 PR 17-SEP-1997; 97US-0059122P.
 PR 17-SEP-1997; 97US-0059184P.
 PR 18-SEP-1997; 97US-0059263P.
 PR 18-SEP-1997; 97US-0059266P.
 PR 15-OCT-1997; 97US-0062125P.
 PR 17-OCT-1997; 97US-0062285P.
 PR 17-OCT-1997; 97US-0062287P.
 PR 21-OCT-1997; 97US-0063486P.
 PR 24-OCT-1997; 97US-0062814P.
 PR 24-OCT-1997; 97US-0063045P.
 PR 24-OCT-1997; 97US-0063120P.
 PR 24-OCT-1997; 97US-0063122P.
 PR 24-OCT-1997; 97US-0063127P.

PR	24-OCT-1997;	97US-0063128P.	PA	(GBTB) GENENTECH INC.
PR	27-OCT-1997;	97US-0063327P.	XX	
PR	27-OCT-1997;	97US-0063329P.	PT	Ashkenazi A, Borstein D, Desnoyers L, Eaton DL, Ferrara N, Fong S, Gao W, Gerber H, Gerritsen MB, Goddard A; Filvaroff B, Grimaldi JC, Gurney AL, Hillan KJ, Klagsbrun M, Mather JP, Pan J, Paoni NF, Roy MA, Stewart TA, Williams PM, Wood WI;
PR	28-OCT-1997;	97US-0063341P.	PI	Gedowska PA;
PR	28-OCT-1997;	97US-006342P.	PI	Hillman KJ;
PR	28-OCT-1997;	97US-0063344P.	PI	Klagsbrun M;
PR	28-OCT-1997;	97US-0063349P.	PI	Tumas D;
PR	28-OCT-1997;	97US-0063450P.	PI	
PR	28-OCT-1997;	97US-0063364P.	XX	
PR	29-OCT-1997;	97US-0063435P.	WPI	WP1: 2003-521801/49.
PR	29-OCT-1997;	97US-0063704P.	DR	WPSDB; ADA16280.
PR	29-OCT-1997;	97US-0063732P.	XX	
PR	29-OCT-1997;	97US-0063734P.	PT	New genes encoding for secreted and transmembrane PRO polypeptides, useful for treating e.g. cardiac insufficiency disorders, wounds, cancers, obesity, diabetes, hyperinsulinemia, hypoinsulinemia, or arthritis.
PR	29-OCT-1997;	97US-0063735P.	PT	
PR	29-OCT-1997;	97US-0063738P.	PT	
PR	29-OCT-1997;	97US-0064215P.	XX	
PR	31-OCT-1997;	97US-0063870P.	PS	Claim 12; SEQ ID NO 245; 476pp; English.
PR	03-NOV-1997;	97US-0064103P.	XX	
PR	07-NOV-1997;	97US-0064248P.	CC	The invention discloses isolated PRO secreted/transmembrane polypeptides and the nucleic acid encoding them. The polypeptides can be used to raise antibodies that specifically bind to the PRO polypeptide, for linking a biactive molecule to a cell expressing a PRO protein and for modulating at least one biological activity of a cell. PRO polypeptides are useful for detecting other PRO polypeptides in a sample and for linking a biactive molecule to a cell expressing a PRO polypeptide. The PRO polypeptide antibodies are useful for modulating the biological activity of a cell expressing PRO polypeptides. The PRO polypeptides or polynucleotides are useful as pharmaceuticals, diagnostics, biosensors or bioreactors. These are useful for stimulating hypoxia responsive factor (HIF-1) -stimulated proliferation of endothelial cells, modulating the proliferation of stimulated T-lymphocytes, enhancing the survival or proliferation of retinal neurons or rod photoreceptor cells, inducing c-fos in endothelial cells, modulating glucose or FFA uptake, inducing proliferation and/or re-differentiation of chondrocytes. In particular, these are useful for detecting or treating cardiac insufficiency disorders, wounds, cancerous tumours, retinal disorders or injuries (e.g. loss of sight due to retinitis pigmentosa), obesity, diabetes, hyperinsulinemia, hypoinsulinemia, or bone or cartilage disorders (e.g. sports injuries or arthritis) in mammals. PRO polypeptides and their portions affect the expression of genes which have a role in cell death. The polynucleotides are useful in molecular biology including uses as hybridisation probes for cDNA library to isolate the full-length PRO cDNA or to isolate other cDNAs, in chromosome and gene mapping, in the generation of antisense RNA and DNA, for preparing PRO polypeptides, for generating transgenic animals or knockout animals which are useful in the development and screening of therapeutic agents, as probes and for the genetic analysis of individuals with genetic disorders as well as for recombinantly expressing the protein and for chromosome identification.
PR	12-NOV-1997;	97US-0065186P.	CC	The proteins are useful as molecular marker for preimplantation genetic diagnosis, for screening compounds to identify those that mimic the PRO polypeptide (agonists) or prevent the effect of the PRO polypeptide (antagonists). The polynucleotides and proteins are useful for tissue typing. PRO antibodies are useful for immunohistochemical staining and/or assay of sample fluids. Anti-PRO antibodies are useful in diagnostic assays for PRO e.g. detecting its expression in specific cells, tissues or serum and for affinity purification of PRO from recombinant cell culture or natural sources. The PRO genes may also be used in gene therapy, particularly for replacing a defective gene. The sequence presented is a PRO polynucleotide of the invention.
PR	17-NOV-1997;	97US-0065846P.	CC	Sequence 713 AA;
PR	18-NOV-1997;	97US-0065693P.	CC	Query Match Score 37; DB 6; Length 713;
PR	21-NOV-1997;	97US-0066120P.	CC	Best Local Similarity 60.0%; Pred. No. 1e+02;
PR	21-NOV-1997;	97US-0066364P.	CC	Matches 6; Conservative 4; Mismatches 0; Indels 0; Gaps 0;
PR	24-NOV-1997;	97US-0066453P.	CC	Db 135 HSPAGLASLQ 144
PR	24-NOV-1997;	97US-0066466P.	CC	
PR	24-NOV-1997;	97US-0066511P.	CC	
PR	24-NOV-1997;	97US-0066770P.	CC	
PR	24-NOV-1997;	97US-00666772P.	CC	
PR	25-NOV-1997;	97US-0066840P.	CC	
PR	12-DEC-1997;	97US-0069425P.	CC	
PR	04-JUN-1998;	98US-0088026P.	CC	
PR	10-SEP-1998;	98US-0099803P.	CC	
PR	10-SEP-1998;	98WO-US0118824.	CC	
PR	14-SEP-1998;	98US-0100262P.	CC	
PR	14-SEP-1998;	98WO-US019177.	CC	
PR	01-DEC-1998;	98US-01025108.	CC	
PR	22-DEC-1998;	98US-0113296P.	CC	
PR	07-JUL-1998;	98US-0143048P.	CC	
PR	26-JUL-1998;	98US-0145698P.	CC	
PR	29-JUL-1998;	99US-0146222P.	CC	
PR	08-SEP-1999;	99WO-US020594.	CC	
PR	13-SEP-1999;	99WO-US020944.	CC	
PR	01-DEC-1999;	99WO-US021090.	CC	
PR	15-SEP-1999;	99WO-US021547.	CC	
PR	05-OCT-1999;	99WO-US023089.	CC	
PR	29-OCT-1999;	99WO-US023214.	CC	
PR	30-NOV-1999;	99WO-US028313.	CC	
PR	01-DEC-1999;	99WO-US028301.	CC	
PR	02-DEC-1999;	99WO-US028564.	CC	
PR	16-DEC-1999;	99WO-US030095.	CC	
PR	20-DEC-1999;	99WO-US030911.	CC	
PR	05-JAN-2000;	2000WO-US000219.	CC	
PR	11-FEB-2000;	2000WO-US03565.	CC	
PR	22-FEB-2000;	2000WO-US04414.	CC	
PR	24-FEB-2000;	2000WO-US05004.	CC	
PR	02-MAR-2000;	2000WO-US05841.	CC	
PR	20-MAR-2000;	2000WO-US07377.	CC	
PR	30-MAR-2000;	2000WO-US08439.	CC	
PR	02-JUN-2000;	2000WO-US015264.	CC	
PR	28-JUL-2000;	2000WO-US020710.	CC	
PR	28-AUG-2000;	2000WO-US023328.	CC	
PR	18-SEP-2000;	2000WO-US065350.	CC	